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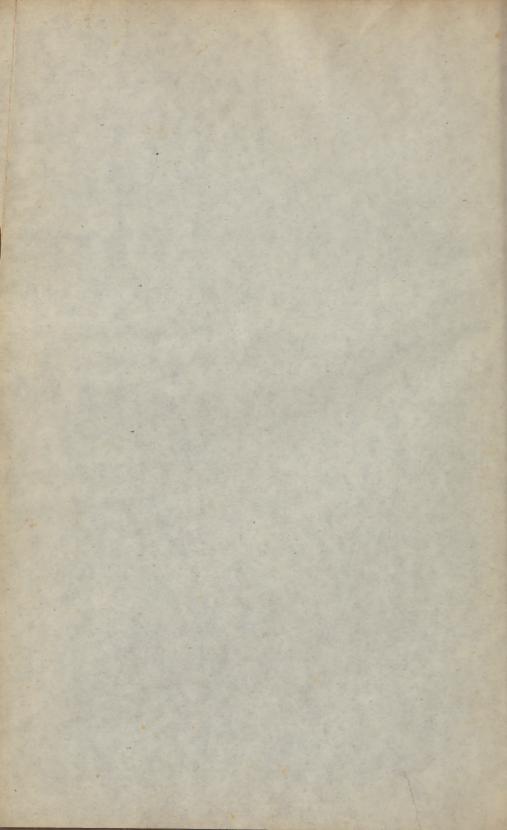
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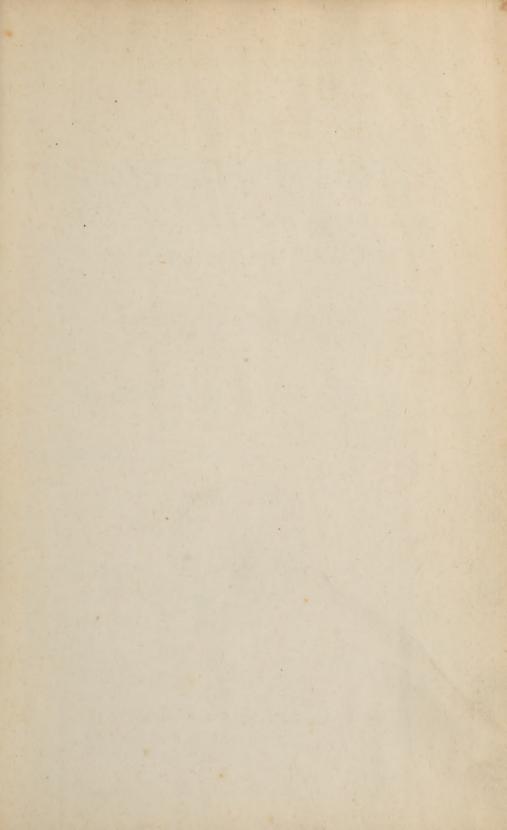
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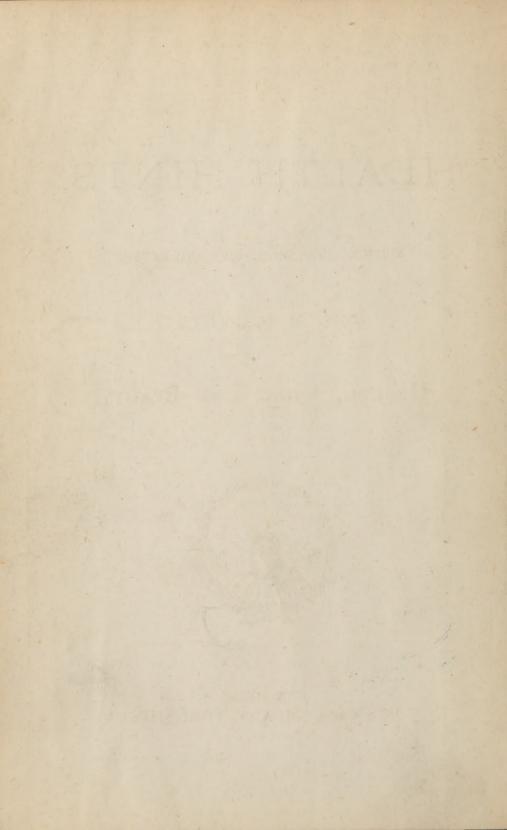
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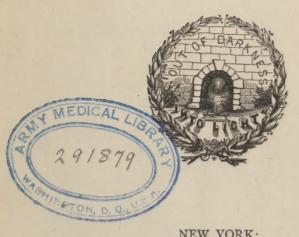


# HEALTH HINTS;

SHOWING HOW TO ACQUIRE AND RETAIN

BODILY SYMMETRY,

HEALTH, VIGOR AND BEAUTY.





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# HEALIATIA HINTS H428 1873

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## HEALTH HINTS.

#### CHAPTER I.

#### THE LAWS OF BEAUTY.

A correct definition of beauty is rather difficult to give, involving as it does so wide a variety of causes which produce its component parts. Of these causes, climate, temperament, and education-in part, if not altogether, under right conditions and in proper proportions-combine to produce beauty of perfect standard. This perfection is embodied in the woman or man whose temperament is equally balanced, whose physical proportions are all duly developed, who enjoys sound health, and whose mental capacity is, by education, made worthy of the temple wherein it dwells, especially in those characteristics which show forth love to man equally with love to God. The impersonation of these qualities would show us the highest type of beauty—a type difficult of attainment, for the reason that each of these excellences must needs be perfect in itself to yield a completely beautiful The nearer we approach to a just and consistent observance of all the laws which govern our introduction into and existence in this world, the nearer shall we be to showing, in our bodies and minds, the absolutely beautiful.

The great variety of human forms which we see around us is owing to the influences of birth, climate, employment, and education; and these diverse forms embody different elements of the beautiful, in different degrees.

There is one form of beauty which characterizes a predominance of the motive temperament: the figure is tall and striking, the face oblong, the complexion and eyes generally, but not always, dark; and the hair is dark, strong, and abundant. The Diana of Grecian sculpture furnishes a fine classic representation of this style of beauty.

Beauty in which the vital temperament is supreme is marked by breadth and thickness of body proportionally greater, and stature and size of limbs proportionally less than in the motive temperament. The face inclines to roundness, the neck is rather short, the shoulders broad and round, the arms and legs plump, but tapering and delicate, and terminating in hands and feet relatively small. The complexion which accompanies these proportions is generally rather florid, and the hair is soft, light, and abundant.

In beauty where the mental temperament bears sway, the face is generally oval, the forehead high and pale, the features delicate and finely chiseled, the eyes bright and expressive, the neck slender, the limbs small, and the whole figure delicate and graceful rather than striking and elegant.

We see in this classification three typical forms of beauty, all other forms being produced by the interblending of the motive, mental, and vital types. This again brings us to the question, What constitutes true beauty? And it is next to impossible to answer this, as no two persons think exactly alike on the subject, for the reason that no one is capable of judging from the standpoint of another. One admires the tall and graceful form, another the short and petite; one worships beauty crowned with black hair and lighted with dark eyes, another that given by golden tresses and blue eyes; and so on, in a variety wide as the range of human likes and dislikes.

Another reason why an acceptable definition of true beauty is impossible, is, that beauty belongs to the ideal world rather than to the real—to the far-off future rather than to the practical present. But while a description is thus unattainable, the methods to be employed in bringing the human form to the perfection which we all imagine, are easily demonstrable; and I propose to show them in the succeeding chapters.

#### CHAPTER II.

THE TRANSMISSION OF HEREDITARY QUALITIES AND THE MANAGEMENT OF INFANCY.

It is much more desirable and easy of accomplishment to be born healthy and beautiful than it is to be endowed with a diseased body, a plain face, and an unsymmetrical form; and then, in the latter case, to endeavor to become healthy by a faithful observance of the laws of life, or to put on beauty with the aid of cosmetics, false hair, forms, etc. If mothers could only realize this fact, and study, learn, and obey the laws that govern the birth and growth of new souls, the world would soon blossom with human beauty in its purest, highest, and most Christ-like form. What an infinity of vain repinings and unsatisfied longings would be avoided if mothers, in

originating boys and girls, would so live and act as to produce an approach to perfection in face and form! And this can easily be done. It only requires the faithful observance of the laws which govern reproduction—laws that are as simple and easy of observance as the laws which govern eating and breathing.\*

Although personal beauty has its origin in causes which are dated before birth, viz., in the germ, yet our mothers and nurses can do much, before infancy, toward assisting to develope perfection of form; for distorted shoulders, injured spines, weakened joints, and deformed legs, are generally the result of carelessness, mismanagement, or ignorance, of those who have charge of the innocent sufferers.

I would say here that there is no greater cause of deformity and disease in the child than the absurd system of wearing stays or corsets during pregnancy. Mothers whose desire it is to generate bright, healthy, perfectly formed children, should wear nothing that can exercise the slightest compression on any part of the body.

If the mother wishes to secure health and beauty for her child, she should—

First. See that the diet of the child is natural—that flowing from her breast: no substitute can be so conducive to the health of her offspring. When it is rendered, by circumstances, absolutely necessary to otherwise nourish the child, great, very great, care should be taken to obtain food of absolute purity, of the kind decided to be the best.

Second. Next in importance to diet are clothing and bathing. In clothing. ease and warmth, two all-important points, should be attended to regularly. Ease can only be attained by avoiding all unnecessary bandages, which prevent the free use of the joints and retard the circulation of the blood. An infant has been likened to a mass of compressible vessels, through which a fluid is to pass without its circulation being impeded; and these vessels are surrounded by a substance which will not bear any considerable pressure without being injured. Keeping this idea in view, how irrational does it appear that, under the pretence of supporting an infant's frame, the mother should frequently bind the babe so tightly as to give it continual pain! How can such compression be other than painful? It is monstrous that a delicate being, who an hour before swam in a fluid to prevent its being injured by the surrounding parts of the mother, should be bandaged to all but suffocation. And the efforts of the child to free itself, when thus absurdly bound, form a frequent cause of deformity. Especially should particular attention be paid to cleanliness, inattention to which lays the foundation for many weaknesses and deformities. Plenty of exercise, water, and friction on the

<sup>\*</sup> These laws are plainly and fully given in "The Science of a New Life," by Dr. John Cowan, a work which every mother should possess.

skin, are sources of health throughout the whole period of growth, from infancy to maturity.

Third. See that the infant is carried in a proper position; for on this the future beauty of its form very much depends. It should recline horizontally for the first two months, or until it shows a desire to sit up; and then the back and head should be carefully supported. It is exceedingly painful to very young infants to be carried in an upright position: it makes them irritable and fretful, and it is a frequent cause of spinal affections, hump-backs, and other deformities.

Fourth. Avoid all swinging cots and cradles. Diseases of the brain and squinting are often produced by these apologies for idleness. Moreover, the child will never require to be rocked to sleep if it has been properly treated from the time of its birth. In the beginning, good habits are easily formed; and at no time of life has habit more influence than in infancy.

Fifth. Plenty of sleep and warmth are essential to an infant.

Sixth. If you wish your child to retain perfect health, the fountain of beauty, never allow soothing syrups, cordials, or narcotics of any description to be administered to it; and mothers should especially guard against the nurse dosing the child surreptitiously with these poisonous preparations, for idle attendants will resort to this practice to save themselves the trouble of giving personal attention to their charges. Narcotics frequently impart a sallowness, which can never be eradicated, to the complexion; and they always injure, if not destroy, the constitution,—retarding the development of the child's form, and very often producing weakness which proves destructive to incipient beauty.

Seventh. The daily exercise of the infant should never be omitted. The exercise should not be given by carrying or dandling the child in the mother's or nurse's arms, but by well rubbing its body and limbs at the time of dressing and undressing, and after bathing. When sufficiently strong, the child may be allowed to roll about and stretch its limbs; and if its powers of observation are active, its toys may be so placed about it that it will try to move to obtain them. Toys for infants should be of a circular form, and of such material that, if the child's face should fall upon them, no injury could possibly take place.

Eighth. The child should always sleep with the mother; but the mother should be careful never to allow the infant to sleep at the breast, for this not only destroys the beauty of the bosom, but also injures the child.

Ninth. In conclusion, mothers should never drive their children to mental exertion before the seventh or eighth year of age, for "experience proves that, when mental exertion is rigidly enforced at an early age, it frequently produces diseases of the brain, water in the head, which, by destroying health, prevents the development of the various organs, mental and

physical. If but a temporary injury to the health from this unnatural exertion was sure to be accompanied by some equivalent improvement in the intellectual system, some persons might endeavor to justify the practice; but unfortunately the reverse is usually the case. A very juvenile prodigy in intellectual acquisitions seldom makes a great man, and for this simple reason: The mind has been so over-wrought by exertion, before it attained strength to bear it, that in many cases the little sufferer has sunk into the grave; and in others, after having attained a certain eminence above those of his age, from pure exhaustion he has stopped, and awaited their passing him without energy to prevent it. There are few persons who have lived much in the world, but must have observed that most of the *mediocres* of their acquaintance had, at one time, been considered prodigies."

#### CHAPTER III.

AIR, SUNSHINE, WATER, AND FOOD.

In no way can health and beauty be so greatly helped in their growth as by careful attention to the use of the four elements which govern them; and of these four—air, sunlight, water, and food,—

#### PURE AIR

has the greatest and most direct influence on health. Its value and importance to our well-being is acknowledged by all, but appreciated only by a few. Beauty as well as health is often sadly marred by the repeated breathing of air loaded with the noxious exhalations of lungs and skin. For this reason, thorough ventilation should ever be attended to, by night as well as by day. "In our large cities and villages, many a lady who has the windows of her sleeping-rooms opened for a short airing once a day, supposes that nothing more is necessary for the twenty-four hours. Speak to her on the importance of ventilation, she agrees with you, remarking that her chambers are always ventilated every day. How surprised would she be on being assured that from seven to ten cubic feet of air per minute should be be admitted, in order to maintain its atmosphere in a fit state for healthy respiration!"

When in the house, see that, by opening the doors and windows, if not by more scientific means, you keep the supply of air fresh and pure. When out walking or riding, or when visiting mountain, river, or sea, empty your lungs to the bottom, and take full and repeated draughts of life-giving, health-restoring, beauty-reviving air. Next in importance to pure air, an unapproachably compounded cosmetic which the great laboratory of Nature offers to the lovers of beauty, is SUNSHINE.

There is an opinion, widely prevalent, that a white skin and pale complexion are indispensable to beauty. This is a great error, for paleness of complexion implies impaired health; and all seekers after the beautiful in face and form should ever remember that beauty is synonymous with perfect health. Whenever the health is absent, or impaired in ever so small a degree, the lines and shadings which give expression to beauty must suffer.

Sunlight gives life, health, color, and beauty; and without it these die. No man or woman can live away from the light and be healthy. No woman can habitually avoid the sun's rays without impairing her health, and that of her skin and her complexion, as well as her beauty. The delicately tinted, roseate, velvety appearance of the complexion depends entirely upon the chemical action of light, and can only be obtained by courting the sunshine. Let but a single ray of glorious sunshine impinge on "my lady's" cheeks, and it will imprint on them more etherial beauty than can be shown by an ocean of "doubly distilled, superfine French vegetable rouge," most artistically applied.

Persons who pass their lives in shaded and dark places are pale, wan, and discolored. Plants are affected in the same way: those which are deprived of light lose their colors and become very pale yellow or white. And the effect of the action of light is not limited to the skin, but has an influence, remarkable in degree, on the remainder of the body. The inhabitants of places deprived of light are not only subject to loss of the color of health, but in time are attacked with atony (want of bone), the skin's functions of exhalation, the motions, the breathing, circulation, etc., becoming languid, and the lymphatic glands, morbidly active, become irritated and enlarged.

It is a great mistake, then, to think that sunshine must be shut out of our houses, and veiled and parasoled away from the face, neck, and arms of all our women, from the lady in the parlor to the girl at the washtub. Ladies should ever remember that, if they habitually avoid the tonic, health-giving, rose-tinting effects of light, under pretence of preserving a fine white skin, they either knowingly or unknowingly do a great wrong; for the whiteness thus acquired arises from debility, and is disease.

Therefore, never shut out the blessed sunshine; but live in that part of the house where its rays are never prevented, by blind, screen, or curtain, from entering in.

#### WATER

enters so largely into the composition of the human body that it necessarily

is a very important element in the growth and acquirement of health and beauty. As a preserver and aid to beauty, it comes next to sunshine. Its use in the bath is the manner in which it is most largely employed; and this brings us to the

#### PHILOSOPHY OF BATHING.

The physiological effects of bathing are observable in two directions: first, as a means of cleanliness; and secondly, as a tonic. The skin does nearly one-third of the work of breathing, and it does it in a manner similar to the operation of the lungs, to which the whole of the function is often ignorantly attributed. If the lungs are diseased, the skin assumes the performance of the chief part of the work of purifying the blood. And by the myriad pores of the skin, waste matter of the body, dissolved in the sweat, is carried off, the quantity being about one and a half pounds per day from each person; but this varies according to season, climate, employment, and other causes. The body is also kept at a proper temperature by the evaporation of the sweat; and hence comes the very great value and importance involved in the right use of water as a cleanser of the skin.

As to its tonic effects, "When the body is moistened with a sponge wetted with cold water, or when affusion, by the sponge or shower bath, is effected, the skin immediately shrinks, and the whole of its tissues contract, As a result of this contraction, the capacity of the cutaneous blood-vessels is diminished, and a portion of the blood circulating through them is suddenly thrown below the surface and into the internal organs. The nerves. among other systems, participate in and are stimulated by this afflux; and, communicating the stimulus to the whole economy, cause a more energetic action of the heart and the minor blood-vessels, and then a rush of blood back to the surface of the skin. This process is termed re-action, and is the object and purpose of every form of bathing whatsoever, and the test of its utility and efficiency. Re-action is shown by the redness of the outer skin, the glow and thrill of comfortable warmth which follows the bathing; and the bather should direct all his care to the insuring this effect. By it the internal organs are relieved, respiration is lightened, the heart is made to beat calmly and freely, the mental functions are clear and strong, the tone of the muscular system is increased, the appetite is sharpened, and the whole organization feels invigorated."

#### HOT AND COLD BATHS.

Hot baths, whether in the form of water, steam, or air, are never desirable in a state of comparative health, as their use inevitably results in a state of languor and weakness. Cold baths are oftimes objectionable, and rarely agree with persons whose vital force is below the normal standard; but to men and women who are strong and healthy, and whose bodies quickly show re-action after the application, cold water is more invigorating, life-

renewing, beauty-insuring, than any other kind of bath. The power of re-action is always in proportion to the strength of the individual, and is consequently slow with weak persons, who with difficulty recover their warmth, who tremble for a long time, and who sometimes suffer acute pains in their heads. Such persons should be very cautious in taking cold baths, and should employ principally the

#### TEPID BATH,

ranging in temperature from eighty to ninety degrees of Fahrenheit. In fact this is the most desirable bath for every person to take, whether strong or weak, young or old. Its daily use will clear and beautify the skin, giving it a transparent complexion and making it as soft and fair as that of the tenderest babe. It is the bath which soothes and restores, which tranquilizes the nervous system, recreates the muscular power and removes restlessness and fatigue.

#### HOW TO TAKE A BATH.

It should never be offered as an excuse for neglecting the bath, which should be taken daily, that the necessary conveniences are not always present when wanted. A bath which will cleanse and invigorate may be taken with a quart of water in the smallest bedroom.

The simplest method of applying water to the skin is by means of a sponge. A part only of the body need be wetted at a time. With the water at the desired temperature, this part should be rapidly sponged, and as rapidly wiped dry, and this should be repeated elsewhere until the whole body has been subjected to the influence of water. A medium-sized, square, rather coarse towel, may be substituted for the sponge, and is, I think, preferable, if used in the following manner. Wet one-third of the body thoroughly and rapidly with the towel, and then as thoroughly and rapidly dry it with another towel, repeating the process on each of the remaining two-thirds of the body's surface. Then subject the whole of the body to friction with the hands. This mode of bathing is as efficacious in cleansing, purifying, and toning the system, as any of the more elaborate baths, and requires for its completion not more than ten or fifteen minutes' time; and its daily use should never be omitted, in summer or winter, by the woman or man who desires health, strength, and beauty.

Erasmus Wilson gives, as a perfection of a bath, the following mode of ablution: "Let the reader divest himself of all his clothing, and, in the uniform of Adam, bend over his hip-bath and give his face and neck a good wash. By the side of the wash-basin, the hip-bath is a small ocean in which he can souse and snort like a sea-god, unfettered in position, uncramped by the narrow dimensions of the wash-stand, and safe against the risk of bespattering the paper of his apartment, or flooding all the joints and drawers of the table with the scattered water. After such a wash, he must feel as I

did when I first tried it—that I had never had a wash before. Then, the head and face washed and dried, let him rub his soan-cake into the armpits and all the creases of the body, and, with the hand, raise a good lather; then let him sit in the hip-bath, and, with a large sponge, spread a stream over the shoulders and trunk, and thoroughly rinse away the soap. Next. let him stand up in the bath and flood the legs with the sponge: then soap the feet and toes with as much care as he would his hands, first one foot. then the other, still standing in the bath; then let him rinse the soap from the feet, and step out upon the woolen rug on which the bath stands. Let him take his seven feet long bath-cloth and throw it, mantle-wise, over his shoulders, and dry himself leisurely,—first the arms, then the trunk, next the feet, and then the legs. Then he will be ready to admit that he has enjoyed the perfection of a bath, and regard the hip-bath with the veneration which it deserves. A gallon or two of water has given him a sense of comfort that will hardly wear off with the day. After the bath, the clothing should not be put on too hastily, to give time to the air to make acquaintance with the skin."

The room in which the bath is taken should be of a warm, pleasant temperature; and, to obtain the full benefit, the operation should be considered, with a happy cheerfulness, to be a real enjoyment. A bath should never be taken immediately after a meal. In the morning, soon after rising or between the hours of ten and eleven o'clock, is the best time for the purpose. The bather should always remember that the more rapidly the bath is taken, the better is the effect produced, and that remaining in a large bath full of water generally results in harm rather than in benefit.

#### FRICTION

has three purposes, namely: "To move the circulation in the skin; to exercise the muscles; and to rub off dirt and loose skin." It is recommended, in most books which treat of bathing, that a flesh-brush, horsehair glove, or coarse towel be used for the purpose of friction. These means undoubtedly do more harm than good, and the irritation of such a delicately formed tissue as the skin by so unnatural a process cannot do otherwise. The best, most natural, invigorating, electrical, health-giving, and beauty-restoring method of friction is with the palm of the hand, the bather rubbing, with his own hand, thoroughly, swiftly, and lightly. If he be in poor health, the rubbing should be done by a second person. The effect of friction, thus performed, is wonderfully restorative, soothing, and invigorating, and this is the only proper way of doing it.

#### HOW TO PROPERLY WASH THE FACE.

It may appear to the reader that washing the face is so simple an operation as scarcely to deserve mention; but in doing this and all other things, there is a right and a wrong way. At least, so thinks Mr. Wilson (already quoted), who says that: "There are many wrong ways of effecting so simple a purpose: there is but one right way. I will tell you. Fill your basin about two thirds full with fresh water; dip your face in the water, and then your hands. Soap the hands well, and pass the soaped hands with gentle friction over the whole face. Having performed this part of the operation thoroughly, dip the face in the water a second time, and rinse it completely: you may add very much to the luxury of the latter part of the process by having a second basin ready, with fresh water, to perform a final rinsing. And now, you will say, what are the wrong ways of washing the face? Why, the wrong ways are: Using the towel, the sponge, or a flannel, as a means of conveying and applying the soap to the face, and omitting the rinsing at the conclusion. If you reflect, you will see at once that the hands are the softest, the smoothest, and the most perfect means of carrying the soap and employing that amount of friction to the surface, with the soap, which is necessary to remove the old and dirty scarf, and bring out the new and clean one from below. Moreover, the hand is a sentient rubber, a rubber endowed with mind: it knows when and where to rub hard, where softly, where to bend, here or there, into the little hollows and crevices where dust is apt to congregate, or where to find little ugly clusters of black-nosed grubs, the which are rubbed out and off, and dissolved by soap and friction. In a word, the hand enables you to combine efficient friction of the skin with complete ablution, whereas in every other way ablution must be imperfect. Then, as regards drying the face, a moderately soft and thick towel should be used. A very rough towel is not desirable, nor one of thin texture. After drying, friction may be performed with the hands. In washing the face, you have three objects to fulfil: To remove the dirt, to give freshness, and to give tone and vigor to the skin."

#### TOILET SOAPS.

The thorough cleansing of the skin is greatly assisted by soap; and its use is a daily necessity to those who do physical labor, and especially so if the labor involves a dusty atmosphere and dirty surroundings. The use of soap "removes the old face of the skin and the varnish of dirt that is apt to form upon it, and so brings the atmosphere nearer to the blood and nerves."

Some persons advise the discontinuance of the use of soap, especially in cleansing the face, on account of its action as an irritant of the skin. This is an obvious error, for soap never irritates the skin, not even the delicate cuticle of the infant. When irritation results from the use of soap, the cause should be looked for in the shape of health of the person, and not in the soap. If health and beauty be desired, soap must be used.

The best kinds of soap to use are white Castile, curd, glycerine, or any other neutral soap. Soaps containing an excess of potash or soda should

be avoided, as their use renders the skin wrinkled and rough, and dries and chaps the face and hands. Medicated, highly colored, or strongly perfumed soaps should never be used on any account.

The parts washed with soap should always be well rinsed with fresh water. The right use of soap is calculated to preserve the skin in health, to maintain its complexion and tone, and, with friction, to prevent it from falling into wrinkles.

#### FOOD.

To those who desire to possess not only perfect health but beauty of face and form, it is important that great care should be exercised in selecting and preparing the food used to renew the worn-out tissues of the body. By using the right kind, in right quantities, and at right intervals, much can be done to insure that the waste particles be replaced with firm, elastic, clean, healthy tissue, that will, in itself, without action or expression, be beautiful; while a young lady, as fair as Hebe and as charming as Venus, may soon destroy her beauty by using wrong food and drink.

"Take the ordinary fare of a fashionable woman, and you have a style of living which is sufficient to destroy the greatest beauty. It is not alone the quantity so much as the quality of the dishes that produces the mischief. Take, for instance, only strong coffee and hot bread and butter, and you have a diet which is most destructive to beauty. The heated grease, long indulged in, is sure to derange the stomach, and, by creating or increasing bilious disorders, gradually overspread the fair skin with a wan or yellow hue. After the meal comes the long fast, from nine in the morning till five or six in the afternoon, when dinner is served, and the half-famished beauty sits down to sate a keen appetite with peppered soups, fish, roast, boiled, broiled, and fried meats, game, tarts, sweetmeats, ices, fruits, etc., etc. How much must the constitution suffer in trying to digest this melange! How does the heated complexion bear witness to the complexion within! Let the fashionable lady keep up this habit, and add the other of late hours, and her own looking-glass will soon tell her that 'we all do fade as the leaf.' The firm texture of the rounded form gives way to a flabby softness, or yields to a scraggy leanness, or to shapeless fat. The once fair skin assumes a pallid rigidity or bloated rigidity, or bloated redness, which the deluded victim would still regard as the roses of health and beauty. And when she at last becomes aware of her condition, to repair the ravages she flies to padding to give shape where there is none; to stays to compress into form the swelling chaos of flesh; and to paints to rectify the dingy complexion. But vain are all these attempts."

Hot drinks, alcoholic liquors, fats, and fat meats, sweets and spices of all kinds, when used daily, invariably result in ill health and loss of beauty; whereas plain simple food, simply prepared, eaten at proper intervals in moderate quantities, invariably result in clear skin and complexion, and growth into beauty of face and form.

Food of great variety is to be avoided, for it almost always causes overeating, and gluttony is a most decided enemy of health and beauty. The amount of plain food on which a person can subsist is astonishingly small; and from a moderate diet, clearness of brain and health of body almost invariably result.

In Scott's "Tales of a Grandfather," there is mentioned the case of an old woman and her daughter who were tried as witches, and condemned, because, though miserably poor, they had contrived to look "fresh and fair" through a terrible famine. The King's Advocate, not believing so thoroughly as some others in Satantic influence, managed to get their secret from them, and found that they had supported themselves solely on the strange diet of snails.

"I once indulged," says Marmontel, "in living for six weeks on milk, at Compiegne, when in full health. Never was my soul more calm, more peaceful, than during this regimen. My days flowed along in study with an unalterable equality; my nights were but one gentle sleep. Discord might have overturned the world, it would not have shaken me."

In 1840, ten of the prisoners in the Glasgow Bridewell were strictly confined to a diet of potatoes—two pounds at breakfast, three pounds at dinner, one pound at supper, all boiled. "At the beginning of the experiment, eight were in good health and two in indifferent health; and at the end, the eight continued well, and the two had much improved. There was an average gain of nearly three pounds and a half in the weight of each prisoner; and all expressed themselves quite satisfied with this diet, and regretted the change back to the ordinary diet."

I give here these illustrations, not because I think it necessary to the attainment of health and beauty that snails, milk, or potatoes should be used, exclusively or together, as a diet, but to show that the more nearly we approach to living on plain, simply cooked food, in moderate quantities, the greater will be the probability of our attaining long life, beauty, and health.

Agents most destructive to clear skins and beautiful faces are tea, coffee, and chocolate, especially the first named. If you drop a few drops of strong tea upon a piece of iron—a knife-blade, for instance—tannate of iron, which is black, is formed. If you mix such tea with iron-filings or pulverized iron, you can make a fair article of ink; and if you mix it with human blood, it will form, with the iron of the blood, the same tannate of iron. Take human skin and let it soak for a time in strong tea, it will become leather. And when we remember that all the liquids which enter the stomach are rapidly taken up by the digestive and absorbent action of that

receptacle, and thrown outwards again by the skin, the respiratory organs, and the kidneys, it is impossible but that tea, a drink so commonly and so abundantly used, will have an effect on the system; and this effect is seen in the tea-drinkers of Russia, in the Chinese, and in the old women of America who have long continued the practice of drinking strong tea. They invariably are dark and leather-skinned now; when young, they were fair-complexioned.

I personally know two sisters of the same temperament, who, when young, were of the same complexion. One of them was for twenty years an inveterate tea-drinker, while the other has never used tea or coffee. The tea-drinker has a face that is wrinkled, sallow, and tanned to a perfectly leather color; while the other sister, though verging on forty years of age, has a face clear, fresh, and plump, and a pleasure to look upon.

Coffee does not affect the skin as tea does; but it is, nevertheless, a cause of much ill health. It is the source of many of the early morning headaches, neuralgia, and other nervous disorders; and beauty depends as much on the perfect working of the nervous system as upon any other physical requirement. No lady can daily use coffee and have strong, healthy nerves; it is a physiological impossibility.

If it be desired that the skin assume a yellow, in preference to a leather color, it can be acquired by the liberal use of hot bread and biscuit, raised with soda, saleratus, or baking-powder. There are few things that will so visibly destroy a clear, pure complexion, as the use of these teeth-annihilating and stomach-disorganizing substances.

Late suppers are undoubted causes of ill health, and sure destroyers of beauty. The eating of sweetmeats, preserves, and all sweetened food, invariably results in disorganized livers and blotched and pimply skins, and should ever be avoided by the woman who possesses beauty and wishes to retain it.

The use of the following articles as food, is invariably detrimental to sound health and perfect beauty, and ladies who desire to grow into a state of soundness, vigor, and gracefulness, rather than into pallor, sickliness, and effeminacy, should particularly avoid them:—

Food largely or even moderately spiced with pepper, mustard, hot sauces, vinegar, etc.

Pickles, salt meat, salt fish.

Butter and the greasy and fat parts of meat. When butter is eaten, it should be perfectly fresh, and used only in moderate quantities.

Pies and all kinds of pastry made "rich" with lard or otherwise. Coffee and tea, especially the latter, and other hot drinks of all kinds. Candies, sweetmeats, and sweetened drinks.

Late suppers.

Eating between meals.

#### HOW CORPULENCY MAY BE CURED.

The subject of food as related to beauty is obviously involved in the production of corpulency and leanness, either of which conditions leads far away from perfection of form and feature. This brings us to the consideration of the means of increasing or diminishing the proportions of the human figure by attention to diet.

The human body requires, for its perfect manifestation, a certain amount of adipose substance: "First, to protect the system from cold, or, in other words, to retain the heat of the body, fat being a good non-conductor of heat. Secondly, to form an insensible cushion to protect the internal organs from the effects of concussions, pressures, etc. Thirdly, to fill up the angles and interstices formed by attaching the muscles to the prominences of the bones, so as to leave the outlines of the body rounded and beautiful, Nature's lines of beauty being always curved, while sharp and angular lines are given for utility."

When the layer of fat is deposited in a larger proportion than is required for the above-mentioned purposes, it is a source of discomfort, and is disease. To remedy this abnormal growth, it is only necessary that food which tends to develope fat-forming tissue should be avoided. This principle is found in all carbonaceous food, which is also heat-producing. Butter, the fat of meats, starch, and sugar, form adipose matter, which, when increased above a normal standard, constitutes corpulence.

This being understood, the reduction of corpulency is easily attained by simply avoiding all food containing an *excess* of the fat-forming principle, such as butter, fat meat, gravies, sugar, and vegetables containing large proportions of starch or saccharine matter.

Whole-wheat flour should be used, in place of fine-wheat flour, which is nearly all starch.

The attainment of a normal size and weight of body requires only that the patient adopt a plan of diet in which nitrogenous or phosphatic food is principally used,—using carbonaceous matter as little as possible, and keeping the pores of the skin open by daily baths and taking active daily exercise. The faithful observance of these rules will most assuredly result in the absorption and disappearance of all extraneous adipose tissue.

William Banting, an Englishman, has, according to his statement made in his pamphlet, cured himself of obesity by abstaining only partially from carbonaceous food. Besides discontinuing the use of white bread, butter, milk, potatoes, etc., he declined to use some liquors, while he took others. It is almost unnecessary to say, to those who observe and think for themselves, that alcoholic liquors should ever be avoided, not only by the obese but by every man and woman who has at heart the desire for a temperate, healthy life. And everybody knows that alcohol in any form tends to pro-

duce obesity, not, however, by adding to the fat, but by retarding absorption. Mr. Banting, probably to give more importance to the point, mentions three times in his pamphlet that, in his training, he used "a tumbler of gin, whiskey, or brandy, at night, as a night-cap." His pamphlet has been sold by thousands of copies; and I wonder how many confirmed tipplers or absolute drunkards have resulted from corpulent persons endeavoring to follow out his system, involving as it does the use of these death-dealing articles!

#### HOW LEAN PEOPLE MAY BECOME PLUMP AND FAT.

Leanness often accompanies a predisposition to disease, but in most cases it belongs to a state intermediate between health and disease. In perfect health, the body should present a rounded appearance; there should be sufficient adipose deposit to give grace and ease of carriage to the person. No ugly prominence of bone should appear, and no emaciation should exist. Leanness, like corpulence, produces physical deformity, and is calculated to destroy beauty of person and elegance of form. Beauty cannot be said to be present where the cheeks are sunken and the collar-bones apparent, even if the features are perfectly regular. To ladies, more especially, leanness is a misfortune; and the remedy for it is in their own hands. if the body is otherwise healthy. Leanness is generally caused by errors in diet arising from a want of due knowledge, by thin people, of the chemical constituents of food: for certain articles of diet nourish the body more than others. Some contain elements' tending to produce fat; some those which go to increase the muscles, bones, and sinews: it is necessary, therefore, that both the thin man and the fat should be well acquainted with the chemistry of the various articles of food.

It must not be understood that, because obesity is caused by excessive use of carbonaceous food, leanness is caused by want of carbonaceous principle in the diet. Two persons may eat at the same table, using precisely the same food; and one of them will grow fat while the other will remain lean. The cause of this difference is to be looked for in the assimilating organs; and it would be found, on examination, that the whole digestive apparatus of the lean person was diseased. The cause of this disorder may generally be traced to the excessive use of carbonaceous food, overloading the stomach, and, more or less, obstructing and impairing the entire digestion and assimilatory system. Impaired digestion is attended by, and perhaps is synonymous with, impaired nutrition and mal-assimilation of food. The overloading the stomach, which produces this, is gluttony; and gluttony, coupled with rapid eating and deficient mastication, is, odd as it may seem, the principal cause of leanness.

It is well known among farmers that "pigs may be cloyed by overfeeding so as to lose flesh, while more corn is before them than they can eat; and

that, by continual overfeeding, they will continue to grow lean. In such cases, in order to fatten them, the food must first be withheld until they become hungry; and then, by feeding at first sparingly and keeping the supply below the demand, their digestive powers will gradually recover, and they will fatten like other pigs." This not only illustrates one of the principal causes of leanness, but, at the same time, gives a hint as to how to cure it.

The first object to be aimed at by a lean person is to get the digestive organs into good trim. The means necessary to this end will, if persevered in, effect a twofold purpose, viz., the restoration of the digestive system to its normal state of activity, and the disappearance of leanness.

Breathing pure air, living in the sunlight, daily bathing the whole body. plain, simply cooked food (eaten in moderate quantities), two meals a day with absolutely nothing between meals, daily outdoor exercise (walking being the most desirable), and a mind free from care and anxiety; these must all be attended to and assiduously cultivated by all the spare and lean people who wish to become plump and symmetrical. A well-known physician has given some very good suggestions for growing plump. They are as follows: "Go to bed at half-past eight or nine, and don't be in a hurry about getting up in the morning. On going to bed and on getting up in the morning, drink as much cold water as you can swallow. Soon you will learn to drink two tumblers, and some persons may learn to drink still more. Drink all that your stomach will bear. Spend a good deal of time in the open air without hard exercise, but exposed to the sun. If practicable, ride in a carriage some hours every day. Remain out enough to give you a good appetite, but don't work hard enough to produce excessive perspiration. Eat a great deal of oatmeal porridge, cracked wheat, Graham mush, baked sweet apples, roasted and broiled beef, though the vegetable part is more fattening than the animal part. Lie down an hour in the middle of the day, just before you take your dinner, to rest; and, if possible, to take a little nap. Cultivate jolly people. 'Laugh and grow fat' rests upon a sound physiological basis. A pleasant flow of the social spirit is a great prompter of digestion. Keep your skin clean, sleep in a room where the sun shines, keep everything sweet and clean and fresh about your bed; sleep nine, if possible ten, hours in twenty-four; eat as I have told you, cultivate the jolly spirit, and in six months you will be as plump as you could wish."

#### CHAPTER IV.

#### WORK AND REST.

It is a requirement, not only of beauty and health, but of our pleasurable existence on this earth, that we work. Beauty may be, for a time, possessed by idle, lazy, or inert persons; but it never remains with them long. Well-directed labor of mind and body is physiologically necessary for the development of a strong manhood and a beautiful womanhood; and these cannot be otherwise attained, unless by transmission; and when they are inherited, work and rest are necessary to render them permanent.

But as work does not always include exercise, it is better to say that exercise is the real necessity, rather than work. The work that best embodies a proper amount of exercise of both body and mind is that of the farmer; and if a woman wish to acquire firm muscles, a rounded form, a clear skin, perfect health, and ruddy beauty, let her seek employment on a farm, where she can have the privilege of working outside—not in—the house; where she can plant and sow, reap and gather, enjoying the unbounded freedom of God's pure air and bright sunshine; and so grow into—what is so rare, so very rare, in this age of modern civilization—a healthy, sweet, lovable, beautiful woman.

The result of this advice will perhaps be doubted by those who see so many wives (of farmers) who are not healthy, and consequently not beautiful. But this is due to causes other than the occupation of farming. All the light outdoor work (and there is plenty of it) appertaining to farm labor can be done by women; and it is by doing this outdoor work that women, if they otherwise obey the laws of life, will acquire perfect health, and enjoy to the uttermost the pleasures of existence. But the great majority of the wives and daughters of farmers are no better than mere drudges, or, in many instances, than white slaves. They are confined in the house from early morning till night, day after day, month after month, doing what? Principally cooking and mending. They breathe only the atmosphere of a close, warm room, and have no outdoor exercise; they eat unhygienic food in improper quantities, at wrong intervals; and all these lead very far away from health, and from the pleasures that appertain thereto.

Farm life will have to be reorganized before it can be the state of existence, suitable to man and woman, that it should be; and it may be made

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the most natural, enjoyable, and healthy occupation for young and old that this world of ours can afford.

"Well-directed exercise favors the preservation of the general health by calling into direct action the majority of the organs of the body; and it also acts powerfully on the skin by stimulating its functions, increasing its temperature, awakening its tone, and subjecting it to a current of the atmosphere favorable to the respiratory offices." The necessity of exercise in the attainment of health and beauty should be understood by all, for no person can enjoy perfect health, or acquire or retain any high degree of personal beauty, without more or less bodily exercise.

Walking, and riding on horseback, are the two preferable modes of taking exercise. Walking especially calls into action a large proportion of the muscles of the body, equalizes the nerve forces, greatly promotes the healthful circulation of the blood, strengthens and developes the lungs, facilitates respiration, stimulates the skin and promotes its action, invigorates the physical and mental powers, and bestows all the advantages that can be derived from any other exercise.

The rules for taking exercise are few and very simple. As one of the first, we consider that the mind as well as the body should be exercised, and that exercise should be taken pleasantly, and, if possible, in the companionship of a friend; or, if taken alone, whether in the form of a walk or a ride, it should be through a beautiful scene, or else the termination should be attractive, such as is the house of a friend or other object concerning which the mind can indulge in pleasant anticipations. If these moral and mental impressions be absent, one of the most natural and delightful aids to the attainment of health and beauty will lose its principal charm, and will not be more beneficial than the methodical walk to the counting-room or workshop, or even than the convict's motion on the treadmill.

Exercise should always be proportioned to the strength of the individual. Too much is as injurious as too little; and unless the person rallies readily from the fatigue, it is a sign that too much has been used. A short walk in agreeable society, either of friends or of one's own thoughts, is infinitely preferable to one of greater distance taken as a task. A walk should never be taken immediately before or soon after meals; and the reason for this is evident when it is understood that active exercise (and, by exercise, I do not mean merely a gentle walk or stroll, but motion which engages all the energies) requires the whole power of the nervous system for the time, and thus a certain quantity of nerve power is necessarily expended. "This loss must be regained before the nervous system is directed upon another effort, such as digestion, which, to be performed well, requires the whole of a sound and fresh nervous apparatus. It is a law of the animal economy that no two actions, requiring each a large expenditure of nerve force, can

be carried on at the same time. Now, exercise, properly effected, is such an action; and consequently, if it be accomplished immediately before a meal, the digestive power must suffer. On the other hand, digestion exhausts the powers of the system so completely that it is a common thing to find it succeeded by lassitude and drowsiness. It is evident, therefore, that if exercise be taken as soon as the meal is swallowed, the food must remain an undigested load on the stomach until the time for rest arrives; and the function will be, if at all, very imperfectly performed."

Exercise should be equal and regular, not a long fatiguing walk or other violent muscular exertion on one day, and entire neglect of it for the next two or three. The time of day most suited for exercise is when the temperature is most agreeable: in summer, the morning and evening; and in winter, the middle of the day. Ladies who wish to enjoy the full benefits resulting from a sharp, enjoyable walk, should see that their clothing in no way hinders the free and untrammeled movements of every muscle in the body. Corsets should be left at home, and the boots should be ample and strong.

Active exercise of body is a necessity to physical beauty; but the active exercise of the mind and the thoughts are also needed to develop the beauty of the face and its expression, seeing that the face is but the index of the mind; and to produce a perfect manhood and a beautiful womanhood, they should always work together and in harmony. Beauty of face is merely a transitory affair when it is not founded on a strong and cultivated mind; and, for the highest type of beauty, it is a necessity that the mind not only be fully educated, but that it daily grow into the good and true rather than the false and selfish. Every human being carries his life written in his face, if we could but read it; and he is beautiful or the reverse according as that life has been good or evil. The fine chisels of thought and emotion are ever at work on our features for better or worse.

Now ladies must understand that an idle life—a life passed in vain, frivolous pastimes and amusements, and in decking the body with the latest gewgaws of fashion—will not, in fact cannot, influence the mind, and so develop beauty of the soul. What is required is that the mind be stored with all the healthy literature of the day; and not only this, but that it exercise thought upon it. Doing this augments the strength of the intellect; and strength (which also implies health) is the highest type of beauty personified.

But in addition to the exercise of the mind through the acquirement of knowledge, it is necessary that the passions be controlled, for vice, envy, malice, and especially selfishness, are sworn enemies to beauty. "What can be done for a human face that has a sluggish, sullen, arrogant, angry mind looking out of every feature? An habitually ill-natured, discontented

mind, ploughs the face with ineradicable marks of its own vice. However well-shaped, or however bright its complexion, no such face can ever become really beautiful. If a woman's soul be without cultivation, taste, or refinement, and if the sweetness of a happy mind be absent, not all the mysteries of art can ever make her beautiful."

The abuse of amativeness, as a phase of the social quality of our natures, is a frequent cause of the loss of health and beauty, and one that is doing much to undermine true manhood and pure womanhood.

Cheerfulness of disposition has a wonderful influence in making beauty radiant; and a cheerful face is, in itself, beautiful. Cheerfulness makes the mind clear, gives tone to the thoughts, and adds grace and beauty to the countenance. Smiles are little things, and cheap articles to be fraught with so many blessings both to the giver and to the receiver; pleasant ripples to watch as we stand on the shores of every-day life. They are our higher, better nature's responses to the soul.

Ever strive after and cultivate charity for all and envy for none; unbounded benevolence and love toward high and low, cheerfulness of disposition, an ever-accommodating spirit, and a daily desire for growth into whatever is good, whatever is true, and whatever is beautiful in the world around us. In following these things diligently will come a beauty of face that will reflect in warm, bright, radiant lines, a soul in harmony with God's divine laws of life and love.

Next to cultivation of the mind by study and the observance of the Christian graces, laughter is the necessary element in the proper growth of mind and soul. The influence of a whole-souled laugh extends not only to the face, "but there is not the remotest corner or little inlet of the minute blood-vessels of the body, which does not feel some wavelet from the great convulsion—the hearty laughter, shaking the central man. The blood moves more rapidly; probably its electrical or vital condition is distinctly modified. It conveys a marked impression to all the organs of the body as it visits them on that particular mystic journey, when the person is laughing, from what it does at other times." And so it is that a good hearty laugh tones down the wrinkles of time, smooths out the furrows of care, brightens up and rounds out the lines of beauty, aids digestion, developes health, and lengthens life.

If work and exercise are necessary to health and beauty, so also is rest; and to those who enjoy "Nature's sweet restorer, balmy sleep," in full measure, will come a daily renewal of life which will contribute much to the attainment of health and beauty.

Night is the time for sleep, because the exciting causes which keep the senses in action during the day are naturally dormant during darkness. Nature herself teaches us to go to bed early and to rise early, and her in-

struction should be faithfully attended to, if the preservation of beauty in perfection is desired. Late hours, and the dissipation that usually attends them, are noticeable destroyers of beauty. The city lady "who goes to bed at indefinite midnight hours, and crawls languidly out at mid-day, with a jaded body and a feverish mind, to mope through the tedious rounds of daily dullness until night again rallies her faint and exhausted spirits," will very soon grow into the wrinkled, "sere, and yellow leaf," and require, as an aid to deception, the use of washes, paints, powders, and pastes.

The bedroom should be large and airy, and well ventilated by night as well as by day. The bed should be of some hard material, such as curled hair, corn-husks, compressed sponge, or straw. Feather beds, as well as feather pillows, should be avoided; for when used, they retain the exhalations from the body so pertinaciously that the latter can seldom be thoroughly eliminated. On this account, they are constant sources of colds, rheumatism, and other diseases.

Too much sleep is as injurious as too little; and no more should be taken than will fully repair the waste incurred in the day's mental and bodily work and exercise.

#### CHAPTER V.

#### DRESS AND ORNAMENT.

The right use of dress has a wonderful influence on the health, strength, and beauty of woman,—much more, indeed, than is generally realized; or else the dictates of fashion would not be so widely observed as they now are by the great majority of women.

The proper purpose of dress is simply to protect the body from differences of temperature, so as to insure uniformity of the vital heat. When, in the use of dress, this is departed from to the slightest degree, it will be found, invariably, that loss of strength, disease, and deformity, will result. Therefore, beauty of face, and, especially, of form, will realize the very great importance of dressing physiologically rather than fashionably, although it is not necessary that a woman, in dressing healthfully, need wholly avoid the prevailing fashions, or entirely ignore all taste in color and material of dress.

The use of low-necked dresses, dragging skirts, corsets or stays, bands, compresses, paddings, heavy skirts which rest on the hips, veils, and high-

heeled boots, is in every particular unphysiological, and a source of much of the sickness and ill health which affect womankind. And of all the above abominations, none is so productive of permanent and lasting injury to the human organism as stays or corsets; and, unfortunately, the ordinary common sense of the women who use these disease-engendering articles, does not lead them to see and appreciate these facts. This I have always been at a loss to understand. So much has been written on the subject that it seems almost useless, at this time, to reiterate the evils appertaining to and resulting from this habit.

A great many (the great majority of) women will allow in part that corsets are injurious when worn tight; and every one of them, to a woman, will assert that they, individually, do not wear them tight: and yet not one of these corseted women can take a deep, full inspiration, or even half fill their lungs. Even if they do not wear them tight enough to prevent them from breathing or existing at all, they certainly compress themselves sufficiently to squeeze out all physiological, and common, to say nothing of Christian, sense. The delusion that stays cannot be hurtful if they are not tightly laced, has done and is doing much more physical harm than is wrought by the foolish few who lace their stays very tightly.

The principal reasons propounded for the use of stays, are, that they support the body, make the waist smaller and give it a rounded appearance, and improve the figure. As to supporting the body, corsets cannot be used, even when loose, without pressure resulting therefrom. This pressure interferes with the growth of the muscles and the circulation of the blood, and thus impedes, instead of assisting, the efforts of Nature. When pressure is made, by corsets or otherwise, upon the muscles which support the body, they invariably decrease in size, and, as a consequence, in strength, is well illustrated by the woman who has worn corsets and who first attempts a reform by omitting their use; for she at once feels, to quote her own words, "as if she would fall to pieces." This feeling, "as if falling to pieces," sometimes extends to such a degree that the use of stavs cannot be dispensed with even when in bed; and this result is owing, simply and solely, to the fact that compression on the muscles which support the body has prevented their exercise and growth, weakening and rendering them small and powerless, and manifestly unfit for the purpose which they are intended to serve in the human economy. The smaller the waist is made by corsets, the sooner will the above-mentioned result be reached.

As to stays giving a roundness of waist, the theory is correct; naturally the waist is broader (from side to side) than it is from the front to the back; in other words, it is slightly flattened. God has made us so; should we not say "wisely," and dare we say "unbecomingly"? What right, then, have we to dispute Nature's laws, and set up an idol for ourselves? What right

have we to establish a standard for the human form, as we would a fashionable shape for a bonnet or for a coat? The truth is that the round waist, being a distortion of the natural shape, is painful rather than agreeable to the eye of man."

Just think of any woman, possessing a modicum of common sense, giving as her reason for wearing corsets, that their use improves the human form, as if Nature had made a mistake in modeling womankind. "No; the machinery of the human body was not made by an apprentice; it came from the hand of a Master—one who understood and established all the sympathies and relations of its internal parts to each other and to external objects." Nature, when allowed freedom for expression, never makes mistakes; she always tends to the production of the perfectly beautiful.

It is difficult to comprehend the number and variety of the diseases produced by the use of corsets; if this were not so, women would more generally make a reform in the matter. In a work by Dr. Coulson on "Deformities of the Chest and Spine," there are enumerated ninety-seven diseases which frequently arise, and always may originate, from this cause. Among them are apoplexy, hump-back, cancer in the breast, asthma, consumption, disease of the heart, liver complaint; premature, difficult, and protracted labors, miscarriage, hernia, prolapsus uleri, and epileptic fits. This list, one would think, would suffice to frighten any lady from this diabolical habit. Dr. Coulson adds, however, that tight lacing usually causes "a sickly and short life," and, not unfrequently, "unhealthy children, ugly children, and the birth of monstrosities."

Owing to the weakening of the muscles, as already explained, lateral curvature of the spine results. A well known effect of the use of the stays is that the right shoulder frequently becomes larger than the left. Stays displace the breasts, flatten them, and also destroy their firmness; they also sometimes prevent the full development of the nipples, and give rise to induration of the mammary glands.

By impeding the circulation of the blood through the lungs, the use of stays not only prevents the proper development of those most important organs, rendering respiration difficult, but it becomes the prime cause of coughs, consumption, palpitation of the heart, and aneurism. Cancer of the breast is oftentimes the result of wearing corsets; and three-fourths of the diseases peculiar to women, as well as difficult parturition, can be ascribed to this curse of civilization.

Yet, notwithstanding all these facts, which are every day self-evident, women will continue to controvert the laws of their being, the obedience to which is as necessary to the attainment of heaven as the observance of any moral laws. For how can good come out of evil? How can pure thoughts, high resolves, holy desires, come out of a diseased body? How can perfec-

tion result from deformity? It is impossible,—utterly impossible. In the attainment of and growth towards perfection, and in the acquirement of beauty of face and form, every law, from the smallest to the greatest, that governs the development of the human body must be observed.

If firmness of muscle, roundness of form, grace of movement, perfect health, and its accompanying beauty are desired, discard, I pray you, for-

ever the use of corsets and compresses of every kind.

Low-necked dresses are not adjuncts to beauty, for true beauty includes not only health but purity of mind and body. Be the fashions what they may, dresses cut low in the neck are in exceedingly bad taste, and always suggest to gentlemen associates, an equivocal idea, to say the least. If a lady has no relative or friend to advise her in this matter, it would be well for her to read this paragraph carefully, to reflect on it seriously, and to remember it always.

Dresses dragging on the ground, whether worn in obedience to the dictates of fashion, or otherwise, are not only unphysiological, but are painful to look upon. Their use never impresses the beholder as being beautiful; but, if he be a man of common sense, inspires him with pity and disgust. Short dresses, or dresses which in no manner touch the ground in walking are, at all times and on all occasions, the most desirable, the most becoming, the most pleasant to look upon, and the most healthful.

Next to the use of corsets, the hanging the weight of the skirts on the hips results in producing the chief obstacles to beauty. The absence of grace in walk and carriage, the "poetry of motion," is almost invariably the result of diseases peculiar to women; and as I have shown, these diseases are largely owing to the use of corsets, and also to the weight of the skirts on the hips, they singly or together, pressing the abdominal viscera downwards and the reproductive organs out of place, thus resulting in "female weakness," etc. All skirts should be fastened to a broad, strong waist-belt suspended from the shoulders by braces as men's pants are suspended; in this way, all compression of the body, from head to foot, is avoided, and the life-giving, beauty-renewing blood is allowed, free and untrammeled, to course through the veins and to build up and strengthen all parts of the body. A free circulation of the blood in every part of the system is an absolute necessity to the growth and the expression of health.

It is a fact, difficult to deny, that fashion kills more women than toil or sorrow; and obedience to fashion is frequently a greater injury to woman's physical and mental constitution, and a greater transgression of the laws of her nature than are the hardships of poverty and neglect. The slave woman will live and grow old at her task, and see two or three generations of her mistresses fade and pass away. The washer-woman, with scarcely a ray of hope to cheer her in her toils, will live to see her fashionable sisters die out.

The kitchen-maid is hearty and strong, while her lady has to be nursed like a sick baby. It is a sad truth that women pampered by fashion are almost worthless for all the good ends of life; they have but little force of character, and still less power of moral will, and as little physical energy. They live for no great purpose in life, they accomplish no great ends; they are dolls, formed by the hands of milliners and servants, to be dressed and fed to order. If they rear children, servants and nurses do all but conceive and give them birth; and when their offspring are reared, what are they? What do they amount to, but to weaker scions of an old, worthless stock? Who ever heard of a fashionable woman's child exhibiting any virtue and power of mind, for which it became eminent? Read the biographies of our great and good men and women; not one of them had a fashionable mother, but they all sprang from women who had about as little to do with fashion as with the changing of clouds.

In the wearing of boots, it is a question whether the heel should be thicker than the sole of the boot, although custom through many generations has so far deformed us that a moderate heel may be desirable. The wearing of high heels, which at this time is "the fashion," is fraught with great harm. High heels with excessively small surface and sharply beveled sides, not only render walking a task of pain and difficulty, but they destroy the shape and beauty of the leg by throwing the weight forward and bringing the strain on the shin, thus diminishing the back muscle and the calf of the leg and bringing the bone and muscle of the forepart into an ugly bow. The editor of the London Lancet, in an article on "the perils of fashion," says: "The custom of wearing high boot-heels, and those too so much smaller than the actual heel of the wearer as to afford no solid support, but only a balancing point, is a source of much mischief. In the first place, it throws the centre of gravity of the body so far forward that a free and gracefully erect carriage is impossible. Secondly, there being no firm support to the heel, ladies are very apt to twist the ankle suddenly by overbalancing themselves; and this is not only bad in itself, but the fear of its occurrence makes them assume a timid, mincing gait. And, thirdly, the effect of driving the foot constantly forward into the toe of the boot is to produce a very ugly and painful distortion of the great-toe joint. There is little need for wonder at the almost fierce contempt with which young men whose characters are at all above the lowest grades of conventional inanity regard the average 'girl of the period.' It cannot be denied that there is a significant correspondence between the æsthetic hideousness and the degrading effects on physical health which are produced by tight stays and crippling boots, and a certain mental and moral tone in female society of the present day which is no less surprising than it is repulsive. The whole dress and carriage of our fashionable women, for several years past, has

been modeling itself with less and less concealment, upon the ideal fur-

nished by Parisian lorettes of the consumptive Traviata type."

In addition to the charges against high heels, brought by the writer above quoted, it may be added that organic difficulties, peculiar to the female sex. may be produced or aggravated by their use. When the body is balanced in a naturally erect posture, the position of the thigh-bone relatively to the line of the body is such that certain important internal muscles are at rest. To overcome the disturbance of equilibrium caused by the elevation of the heel, the body must be thrown back from the hip, thus altering the angle of the thigh-bone in its socket, and placing these muscles on the stretch. thereby giving rise to digestive and other derangements.

Tight boots with thin or narrow soles and high heels are unphysiological, and all result in more or less deformity and disease, and are decided enemies

to health and beauty. Do not wear them.

#### CHAPTER VI.

#### THE HAIR AND ITS MANAGEMENT.

A beautiful head of hair is indispensable to personal comeliness, and without it no man or woman can be considered really beautiful. With a bald head, the woman with the handsomest face and features in the world would be frightful; while, on the other hand, a physiognomy that is defective may be more than half redeemed by a fine head of hair. "Many a dandy, who has scarcely brains enough or courage enough to catch a sheep. has enslaved the hearts of a hundred girls with his Hyperion locks: and I have known women, who had scarcely another charm to recommend them. to carry off scores of hearts by a bountiful and beautiful head of hair."

The use of hair in the animal economy is to preserve the warmth of the body; and, being a non-conductor of heat, it is well adapted for this purpose. Being placed on the head, it serves to equalize the temperature of the brain. In the eyebrows and eyelids, the hair is adapted for the defence of the organs of vision; in the nostrils, to guard the delicate membranes of the nose, and to prevent the passage of articles injurious to the lungs; in the ear-tubes, to defend the cavities from the intrusion of insects.

Every part of the human body, excepting the palms of the hands and the soles of the feet, produces hair; but the hairs of the different parts of the surface vary very much in several particulars. Over the greater portion of

the body they are short and fine; in some places, scarcely perceptible. In the eyebrows, they are of stronger growth and greater length, though still very limited in the latter. They commonly grow much longer in the whiskers, and still more so in the beard, while they attain the maximum of their luxuriance and length on the scalp.

Hairs are formed by glands, situated either in the substance of the true skin or in the fatty cushion beneath it. The gland consists of a little sac. at the bottom of which is a papilla or little eminence largely supplied with nerves and capillary blood-vessels, from the contents of the latter of which the hair is manufactured. The hair, when formed, finds its way outward to the surface through a tube like the ducts of the perspiratory and oil glands, lined with scarf skin. Into these hair ducts, very frequently one, and sometimes two, of the oil-glands opens so as to give the root of the hair the advantage of the softening influence of the oil: and this fact informs us that less grease, oil, or pomatum is needed by the hair than is generally supposed. In the process of growth of the hair, there is a fluid secreted and poured out by the papilla, from the blood contained in its capillary vessels. This fluid, gradually drying, forms first into granules, then into cells; and these cells are aggregated together to form the hair. The hair thus produced is not, however, of uniform structure; as we find, on examination with the microscope, that the cells which constitute it exhibit three different modifications. In the centre of the hair, which is less dense than the other portions, the cells are but little, if at all, altered; they are collected comparatively loosely together, as in the form of a pith, analogous to the pith of a feather. Immediately outside this pith, the cells are split so as to form fibres. These constitute the chief part of the thickness of the hair, and give it its strength. Outside this again is another layer of cells: but these are dried or flattened into little plates or scales, much like those of the scarf skin; so that, in the rough, the hair has much similarity to a young twig of a tree: pith in the middle, fibres outside of this giving it strength, and a coating or bark outside of all.

The fact of the outer surface of the hair being formed of scales overlapping each other will explain why hair is smooth when rubbed in one direction—that is, from root to point—but rough in the other; and why, when we hold a hair between the finger and thumb, and glide these upon it in the direction of its length, the hair invariably moves root foremost.

The average thickness of the hair is one three hundred and fiftieth of an inch. Black hair is thicker than brown, and, as a general rule, brown is thicker than blonde. It has been computed that, upon a square inch of a scalp, 147 black, 162 chestnut, or 182 blonde hairs will be found.

The cells which go from the hair contain coloring matter which gives the tint to the *chevelure*. This coloring matter, however, is not uniformly

distributed through the substance of the hair, but is found chiefly in the fibrous portion; and even in this it varies in different parts, as if some of the cells were fully charged with color and others only partially or not at all so. To this unequal distribution is owing much of the variety of the tints of the hair. Thus an admixture of black cells with white ones gives a grayish hue; reddish cells with white ones, a sandy hue, etc.

A hair when it attains a certain length, varying with its situation, falls off and is replaced by another, undergoing in this respect a process precisely analogous to the scales of the epidermis. In man, this falling off of the hair is going on continually, and not more at one time than another; in other animals, it occurs at stated periods. When, however, the hair is shaved off at short intervals, this moulting or dropping off ceases, the artificial removal doing away with the necessity for the natural one.

The rapidity of the growth of the hair varies very much in different persons. It has been calculated that the beard grows at the rate of one line and a half a week, or six inches and a half in a year. On the head, the growth is evidently much more rapid, if not by nature, by the influence of frequent cutting.

As a fine head of hair is so desirable an acquisition, great care should be taken in its management. The combs used should be of tortoise-shell, bone, or vulcanized rubber; the teeth should not be too sharp; and if they are so when the comb is purchased, they can be blunted by being passed over paper several times folded, or by friction on sandpaper. Unless this is done, the scalp is liable to injury. The practice of using fine-toothed combs is a bad one, as the sharp points of the teeth are sure to irritate and scratch the scalp, and are almost certain to produce an excess of scurf or dandruff. In dressing the hair, scratching the scalp with the comb should be carefully avoided: combs are for arranging the hair, and not for irritating the skin. When convenient, two brushes should be used to dress the hair: one should be a hard brush of elastic bristles somewhat irregular in length, to clean the roots and brush the scalp, and a soft one to smooth and polish the hair.

In cleaning brushes, they should not be washed, lest they lose their firmness and elasticity. The way to clean them is to rub them thoroughly with bran, which must be cleared away with another brush. This removes all the grease, and leaves the bristles stiff and firm as ever. One part of spirit of ammonia and two of water is also an excellent wash for the purpose, as it leaves the brush hard after thoroughly cleansing it from grease.

Combing and brushing should always be done in the natural direction of the hair, and never against it on any account. As a rule, if the hair be properly brushed, it cannot be brushed too much; the more the brush is used, the healthier the skin becomes, and the more beautiful the hair.

Cutting the hair in a proper manner does much toward a perfect and luxurious growth. But with young children, care should be taken not to cut it too often; and the same precaution must be observed with those in ill health, and in very hot and cold climates. Never cut the hair very near the bulb, as in shaving the head, for the effect will be otherwise than healthful. The hair of young children should not be cut too frequently, as is sometimes done to make it grow thicker, as it increases the exhalent power of the scalp unnecessarily at the time of life when that function is quite active enough. It is sufficient to tip, or cut off a quarter or half an inch of the ends, once in two months.

Notwithstanding that men's hair is, more or less, closely cut, it is weaker, and more apt to fall out and to turn gray, than women's. But this is, in all probability, due more to men's head-gear than to the habit of cutting it short. The true philosophy of cutting the hair, especially of ladies, is given by Mr. Erasmus Wilson. He recommends that, when the hair is being cut, the different hairs be separately examined, and whenever a hair that is in any way diseased, split, impoverished, faded, discolored, or withered, is found, let it be cut off down to the healthy part, and the sound hairs left as they are. This method involves much labor and patience, but these will be amply repaid by the resulting vigor, length, and beauty of the hair.

The great length of ladies' hair involves much care and time in its management and dressing; and, for this reason, it is well here to suggest that ladies wear their hair short, only reaching to the dress, on the neck. It would then be much more easy to wash, dress, and manage, and the split and otherwise faulty hairs could be more easily separated; and it would be more healthy and becoming, in a physiological point of view, than the adding false hair to build up a chignon. But this suggestion will be little heeded, as the dictates of fashion are more thought of than health and comfort.

Cleanliness of the scalp and hair is as necessary as of any other part of the body. To wash it, use warm water rendered frothy with a little toilet soap; after using this, rinse it off thoroughly with clean cool or cold water; then dry with towels, and then by the sun. If the latter does not shine, go to the stove. Complete the operation by well brushing the hair.

The necessity for frequent washing depends on the nature of the hair and on the occupation of the owner. Supple, moist, oily hair may be washed once a week. Light-colored hair, which is not so oily, need not be washed so often. Constant work in a dusty atmosphere necessitates very frequent washing of the head.

Many ladies seldom or never wash their hair, on account of the trouble caused by its length. But, obviously, the longer the hair is, the more difficult it is to keep clean, and therefore the more necessary is it that it be

perfectly cleansed. This is another and an excellent reason why the hair should be worn short rather than at its full length.

Powder, yolk of egg, solution of borax, etc., have been and are used to cleanse the hair, but they are all more or less objectionable. There is nothing for this purpose better than water, which, more than anything else, imparts brilliancy to the hair; but the hair must always be well dried, brushed, and combed. On a clear day, the rays of the sun should be employed to complete the drying process, as the sunlight adds to the qualities that beautify it.

Natural curling of the hair is owing to a turn imparted to the shaft of the hair by the true skin as it passes through. "Animal matter, having saline substances in its composition, has a great disposition to attract fluids from the atmosphere; and when this occurs, the shaft of the hair becomes swollen and straightened. When, on the contrary, the hair contains a large proportion of oily substances, the action of the salts in the animal matter, in the absorption of fluids, is checked, and the hair maintains its natural curliness."

Artificial curls may be produced by long pressure, by the application of heat, or by the use of some chemical mixture of which a strong acid is the base; but the last method should be avoided, for the acid soon destroys the vitality of the hair. Curling-irons are fatal to the hair, both of children and adults. The heat saps the juice out of the fibres as effectually as fire or frost saps the vitality of a green branch, leaving it but a dry, withered skeleton. The practice which hairdressers have of frizzing out the hair with a comb to make the most of it, is one of the most injurious that can be inflicted on the living hair, as the comb cuts it in the act of frizzing it. You can test the truth of this by combing out the hair after it has been so dressed: it will sometimes come away by handsful; and further, this process so tangles up the hair that a great deal of it is broken and pulled out in trying to comb it straight again. Curling with papers or curling-sticks is really the only harmless and safe method; and especial care must be taken that they be not wound too tight, or that strain be otherwise brought on the The curls or hair may be fixed in place with a simple preparation made by dissolving three ounces of powdered gum Arabic in half a pint of rose-water; after straining, a drop of the solution of aniline red may be added to give it a rosy color.

Preparations, patented and unpatented, for dressing the hair, are almost numberless; and it is a question if even the simplest of them does no harm. Healthy hair has its own oil, which gives to it all the gloss which is required; and the application of a merely inert substance to the hair may affect even to altogether impeding this natural secretion of oil, and so lay the foundation of disease. There is no doubt that the use, not only of patent nostrums,

but of the whole paraphernalia of greasy, rancid, offensive oils from animals, is a practice which is sure, sooner or later, to destroy the vitality of the hair. Instead of nourishing the growth (which can only be done by the hair's own natural vessels, and not by patented and filthy applications) the pores are obstructed and the hair suffocated. Especially do preparations containing alcohol harm the hair, drying and corroding it, causing its color to fade, and making it either brittle or to fall off quickly.

If the hair is greased to make it look glossy for a specific occasion, in a short time the application must be repeated; the grease runs down to the roots of the hair in the scalp, and carries with it the dust which is always falling on the head, soon forming a cement which closes the pores of the scalp, preventing the healthful flow of the fluids which are intended to keep each hair sound, pliant, and soft. The hair then becomes dry, harsh, and imperfectly nourished, and then dead.

Much of the immense quantity of hair now worn grew once on the heads of the young girls of Normandy, who keep their hair covered with a hand-kerchief, and never, by any possibility, allow anything to be put on it, even water. Vigorous health, with natural aids only, gives them their wealth of hair, which requires no dressing whatever. We destroy it by torturing it, by straining it against its natural direction, by curling it and frizzing it, and by keeping a bed of grease and dust around its roots, which impedes the flow of the natural nourishment to it, and causes it to fall out and die. And all this mischief is frequently done before our daughters have reached womanhood, and too often before they have reached their "teens."

The only time when an oily dressing can possibly be required for the hair is after washing it; and then, after it is well dried and brushed, the smallest—the very smallest—quantity of some simple vegetable oil may be applied; or a preparation, which is the very best which I know of for the purpose, may be used. It is made by mixing pure glycerine with rose-water, one part of the former to three of the latter. A moderate quantity of this, well rubbed on the hair, will make it soft and moist, without in the remotest way injuring it.

Powdering the hair, as the custom once was, and now threatens to again become the fashion, is in itself harmless, the powder being generally finely ground and scented potato starch; and if the hair and scalp be daily washed, no very bad results will follow from the use of such powder. Powders made from colored glass do great harm, as they cut and otherwise destroy its vitality and beauty. Only the devotees of extreme fashion will adopt this outre method of adorning (?) beautiful hair. It is almost unnecessary to say that no woman possessing a definite purpose in life, with high aims and pure desires, will ever disfigure the natural and beautiful crowning

glory of her head with potato, "cypress," gold, or any other powder, at the dictates of imperious fashion.

There is no more puzzling consideration, to many ladies, than this: How shall we turn to account the finest ornament that Nature has given us? Few remember that our best models are the antique busts and statues. There the ideal of outline is preserved, and the great rule, without which beauty is not possible, the law of proportion, is rigidly adhered to. Let no lady imagine that she can violate that law without wronging whatever beauty she may possess. There was a time when huge bands of hair flared out at the sides of the head, giving a spread-eagle impression that was anything but becoming. Then an enormous braid on each side of the face followed. These styles were equally erroneous; but, one after the other, they held sway for many years.

Remember that nothing is more beautiful in a face than the line from the ear to the tip of the chin, when that line is part of a perfect oval; and art teaches us how to produce the effect of an oval, even when that shape does not exist. Never allow the hair to encroach on the eyebrows. The rule for wearing the hair on the forehead in curls or waves is not so arbitrary as it would appear to be in statuary; and it is to be admitted that, to some faces, the fall of wavelets or tiny curls, or even the row of short hair cut to one length, which has been lately introduced, is ofttimes becoming.

Much will be gained to the æsthetic eye if the following rules are respected: Never allow the head to look big; never allow a mass on the neck; never encroach on the eyebrow; if very tall, avoid wearing the hair too high; if short, avoid any bigness about the head or neck; study proportion. Remember these rules especially when sitting for a photographic or other portrait. Another very important rule is: Never flatten the hair upon the skin of the forehead, with water or bandoline. A real artist is tempted to howl at the sight of this hideous abuse.

At night, when retiring to bed, the hair, if worn long, should be loosed from its fastenings; and, whether long or short, should be allowed to remain uncovered and untrammeled during the night. Night-caps are a relic of barbarism, and should never be worn. If the hair and scalp be kept in a healthy condition, and, especially, free from pomades and other greasy applications, the pillows and bed-clothing will be in no way soiled.

In the arrangement of the hair, the more simply and naturally it is worn the more pleasing and becoming will the effect be.

Of all habits that destroy the hair, the most hurtful is the constant use of oils, pomades, and patented preparations. As a rule, all patented nostrums, widely puffed and advertised in the newspapers, should be avoided; for, compounded as they are of the poorest and cheapest materials, they can be nothing but deleterious.

Another habit, destructive to the beauty of the hair, is the use of strongly alkaline soaps in washing it. Strong soap invariably changes the color of the hair, even when it produces no greater harm. White Castile, glycerine, or other neutral soap, should always be used for the purpose.

The practice of unnecessarily twisting the hair in any way is very injurious; and many fine heads of hair have become thin and gradually lost in

consequence.

In tying up the hair, care must be taken not to tie it too tightly, for fear of insensibly injuring it.

The use of hot curling-irons tends to dissipate the moisture of the hair, to split the ends, and to weaken the roots; and frizzing the hair, in addition to the evils already mentioned, destroys its brilliancy.

It is to be noticed that there are a thousand bald men for one bald woman. The head-dress of women, dictated as it is by fashion, is often inharmonious, not to say absurd; but it very seldom interferes with the ventilation of the scalp, as does man's head-dress. And this cannot be otherwise, for it is impossible to wear the ungainly, unbecoming, absurd-looking "stove-pipe" hat without compressing the scalp-arteries that go to supply growth and nourishment to the hair follicles. The use of tobacco has also been proved to be an aid to the production of baldness in men. Soft felt-hats are nearly always becoming, and are at all times the most physiological and healthful.

Of the

#### DISEASES AFFECTING THE HAIR.

the first to be noticed is brittleness, which makes the hair inelastic, and causes it to break across its length easily when combed or brushed. This condition arises from an absence of some of the elements necessary to a natural growth of the hair, owing to a want of health in the skin. Constitutional more than local remedies are necessary; and careful attention to the general health will usually result in the return of the hair to its normal condition of elasticity and moistness.

Gray hair is a condition the possession of which few people desire or are satisfied with. Heralding as it does the slow but sure step of advancing age, it is looked upon with dread. The constant desire to hide, by dyes or wigs, its appearance, is an ever-present source of hypocrisy and deceit; an appearing in false colors which not only does evil, mental and spiritually, to her who practices it, but causes physical harm, as the dyes and washes are invariably deleterious. Hair-dyes, even those which are vaunted as "not a dye," are generally composed of nitrate of silver, sugar of lead, or flowers of sulphur in solution, or decoction of the walnut, none of which can be constantly used without doing positive injury. It is only recently that the papers recorded the death of a physician in Iowa, from poisoning

by the lead contained in the dye which he had habitually used for his hair and beard.

Nervous headache is an invariable accompaniment of the use of hairdyes, and is especially noticeable when they are used frequently or in excess. Partial paralysis, inflammation of the eyes, and impairment of sight, are also results of the same practice.

The London Lancet, an unquestionable authority, says: "Considering the number of advertisements of preparations for the hair with which almost every paper we take up teems, promising speedy and infallible remedies for every defect or deficiency, it is not a little remarkable and contradictory that one should still behold amongst one's friends and neighbors so many gray and bald heads. As far as we can judge, the number is not less now than it was when we ourselves were young, and before our parting became wide or our hair tinged with silver gray. Is the hair gray?—forthwith one tribe of advertisers promises to restore it to its original color in almost less than no time. Has the scalp become denuded for years of its chief ornament?—another set offers to clothe it afresh with rich and luxuriant tresses. Is the hair lank, and straight, and lustreless?—a third class of hair-restorers advertises a variety of nostrums for rendering it curly, glossy, 'beautiful for ever.'

"The fact that the majority of hair-dyes and washes are made up of constituents which not only injure the hair, but are capable, if absorbed, of seriously affecting the health, is pretty widely known; and denunciations of these hair preparations have from time to time appeared in the public press. These denunciations, however, have been for the most part too vague and general to effect much real good. The advertisements go on much as they did before, and the public still continue to be purchasers. In the case of the adulteration of articles of fcod and drink, general statements produced little result, but when the vender or manufacturer was made personally responsible, the deterring effects were rapid and marvellous; and the same remark is equally applicable to the present subject.

"Of one of the best known and most extensively advertised preparations for the hair it is affirmed that it is the 'best' of all hair-restorers; and the reasons given for its being the best are: 'Because it contains no nitrate of silver, nor any other injurious ingredient; because it does not dye the hair, but acts directly on the roots, giving them natural nourishment. It contains the specific aliment which is the life of the hair, and in this way the natural color is restored.'

"We will now put these statements to the test by reference to the actual composition of the article. We find, then, that it is composed of acetate of lead, sulphur, and glycerine. Now lead, while it is one of the most frequent constituents of hair-dyes, is also one of the most, if not the most,

injurious. It will thus be seen how utterly worthless are the statements above quoted, and that the assertion as to the preparation containing 'the specific aliment which is the life of the hair' is a mere fiction.

"The detection of lead in a hair-dye or wash is very simple, and may be readily effected by adding a few drops of a solution of iodide of potassium to a small quantity of the dye, when, if a soluble salt of the metal be present, it will be revealed by the curdy yellow precipitate immediately produced."\*

Grayness of hair is caused by the cessation of the production of the pigment. In persons having hair of a dark color, this failure of the coloring matter is most frequent and noticeable, while loss of color is very rare in light hair. Grayness usually appears at from thirty to forty years of age, sooner or later depending on the color of the hair, temperament, and hereditary idiosyncracies.

When gray hair appears, it is an indication of a want of tone in the hair-producing organs: and if this tone could be restored, the hair would cease to change, and, at the same time, further bleaching of the locks would be prevented. The plan of cutting already mentioned, together with a judicious plucking, will largely help in preventing the spread of the discoloration. But when we come to the primal cause of gray hair (apart from transmitted peculiarities), we find that it is a result of weakened energy of the nervous system, which causes the before-mentioned cessation in the production of the pigment. To strengthen the nervous system, the laws of health must be rigidly obeyed. Tea, coffee, alcoholic liquors, tobacco, opium, highly-seasoned food, and employments that harass and worry the mind, should all be avoided. A person with gray hair, carefully observing these and other hygienic rules of living and being much in the open air without any head-dress: allowing the sun (except in the hottest part of the day), wind, and rain free access to every hair and root, will find that, slowly it may be but none the less surely, the hair will re-assume its primitive color, strength, and beauty. Unfortunately, this plan of restoring the original color to gray hair cannot well be followed except in the country or in small country towns or villages; but if it be convenient, and the directions be strictly adhered to, the results will be as I have said. This is not a theory, but a fact, tested, tried, and found true.

The falling off of the hair is a source of much anxiety, especially to ladies; and the number of recipes and patented nostrums that are tried and used for this purpose is simply wonderful. It is safe to say that they almost without exception, hasten rather than retard its falling out.

The cause of the loosening of the hair may be local, but is generally the

<sup>\*</sup> See also the chapter on "Cosmetics and Perfumery," further on, for analysis of hair-dyes.

result of some disease, not connected immediately with the hair. The recovery from a fever is often followed by this trouble. Dyspepsia, and, as has been stated, the use of tobacco affect the hair much, especially by promoting its falling off. A close examination of the scalp will show, in many cases, dryness or scurfiness, the roots will be reddened and spongy, the surface will feel hot, and an odor, other than the natural one, will be perceived. To remedy this condition, attention must first be given to the strengthening of the system generally by the observance of hygienic laws. For local treatment, immerse the head in cold water, morning and evening, drying the hair thoroughly (in the sun, if possible), and then brushing the scalp until a warm glow is produced. For women with long hair, this plan may be objectionable, and a better one will be to brush the scalp until redness and a glow are produced, and then rub among the roots of the hair a wash made of three drachms of pure glycerine and four ounces of lime-water. After the use of this for two or three weeks, half an ounce of the tincture of cantharides may be added to the above mixture. The treatment should be used once or twice a day, according to the state of the scalp: if tender, diminish the application; if insensible, increase it. If baldness comes in patches, the skin should be well brushed with a soft tooth-brush dipped in distilled vinegar, at morning and evening, and the general plan of brushing, above described, should be followed. This treatment, given for falling off of the hair, will also be successful in cases of baldness where the scalp has not the smooth, shiny appearance characteristic of complete death, beyond any hope, of the hair follicles.

In the growth of the hair, the root, in contact with the lining scarf-skin, is continually throwing off superficial scales in the form of scurf, which is a natural and healthy formation; and though it may be kept from accumulating, it cannot be prevented. If the head is neglected for a few days, and the brush then used, more or less of this scurf (which, when in excess, is popularly called dandruff) will be thrown off; when it appears in moderate quantities, it signifies nothing; but when there is an excess of it, disease of the scalp is indicated. The treatment should be directed to the regulation of the health by strict attention to its rules, and especially to cleanliness; and again I must say that the use of all patented preparations must be avoided. The daily shower-bath, on the head alone, and a careful, abstemious diet, will soon effect a perfect cure.

When the scurf does not escape freely at the outset of the tube, it becomes impacted, and the hair presses on the sensitive papilla at the bottom of the tube; and the impression so produced, transmitted to the brain by the nerves, is felt as an itching sensation, which induces scratching the impacted matter by the finger-nails. This dislodges it, and allows the hair to resume its natural state. In a healthy condition, the comb and brush should be

quite sufficient, without the aid of the finger-nails, to prevent any such trouble.

The face is sometimes marred by moles, and by hairs in improper situations. The usual method of removing these extraneous hairs is by depilatories (of which arsenic and quicklime are the ingredients), by pulling out the roots, and by shaving. All these processes are next to useless. and that by depilatories is dangerous, often marring the parts beyond recovery. Shaving the parts will make the hair stronger and much more difficult of eradication. The pulling out of the hair with tweezers will also be a fruitless task, because the implement, almost invariably, breaks off the hair at the neck instead of pulling it out by the roots. When the person has the courage, a sure plan is to spread, on a piece of leather, equal parts of galbanum and pitch plaster, and lay it on the culprit hairs as smoothly as possible; and then, after allowing it to remain for about three minutes. pull it off suddenly, and it will be quite sure to bring out the hairs by the roots, and they will not grow again. But women having ordinary good sense will in no way tamper with depilatories or plaster, but will allow Nature's handiwork to remain as it is. These odd hairs, in odd places, go to make up the outward characteristics of the person; and their removal, in the majority of cases, would alter and mar, rather than benefit or improve. the appearance.

Strange as it may seem, the hair which grows on the heads of our fashionable ladies has no commercial value. By much crimping, curling, and dosing with various hair "invigorators," "restorers," pomades, etc., it not only becomes variegated in color but hard and brittle, rendering it wholly unfit for use in the manufacture of hair-work. Indeed, it is found that the more people "take care" of their hair the more they injure it; while the European peasants, who let Nature take its course, and seldom even comb their hair, possess the finest and most delicate article.

In a country like ours, where fashion is a law to the poor as well as to the rich, it has been necessary to provide some cheap substitute for human hair, in order that factory and shop girls, and others of slender means, may vie with their wealthier sisters in the adornment (?) of their heads. For this purpose, several substances are in use. The first put in use was jute, which, after passing through several processes, is reduced to a long and glossy fibre, which in general effect closely resembles hair, and which, owing to its comparative cheapness, rapidly came into general use. By means of dyeing, it was produced in all possible shades, and was eagerly bought, in the shape of switches, waterfalls, etc. To adapt jute to this purpose, nicotine, the essential and poisonous principle of tobacco, and corrosive sublimate, a most deadly mercurial poison, are used; and by this treatment, the jute is rendered exceedingly brittle, even as much so as spun

glass. The small particles find their way through the hair to the scalp, and their edges, being ragged from the combing process, act like so many poisoned barbs, which, entering the pores and being therein, introduce the poison beneath the skin, and thus cause irritation and ulceration. Owing to this, the idea once became current that the jute contained animal parasites, which bored underneath the skin and laid their eggs there.

In addition to the disgusting and filthy nature of the chignons worn by women, there is another reason, recently given to the world, against their use: Medical statistics in France show that the introduction of these articles has increased brain-fevers and other brain diseases nearly seventy-five per cent. If the present fashion prevails for many years longer, we shall be doubtless overrun with bald-headed women. Baldness among men, so general after a certain age, is owing to the habit of wearing the hair "shingled" so closely, and cumbering the head with heating, unventilating caps. Chignons are, of course, as heating as stove-pipe hats, and will in time tend to produce baldness as well as brain disorders.

Again, as the back of the head contains a great deal of blood, and a great deal of blood contains a great deal of heat, the surplus of this heat should be permitted to pass off outwardly. To wear a chignon, or any similar appliance, is simply to keep the heat in; and as any part thus encumbered is hotter than it ought to be, or than it would be if the encumbrance were not applied, disease takes place in a little while, and the whole bodily structure becomes affected. In woman there is such an intimate connection between the back part of the brain and the reproductive structure, that, when the former becomes enfeebled the latter inevitably assumes a morbid condition. If you want to keep your hair neat and beautiful, avoid all these artificial appliances; keep good health; live simply; be sure to take plenty of exercise in the open air; keep your lungs well expanded. and thus your blood well aerated; let your processes of excretion be ample; eat plenty of good food; and, as your body at large maintains its vigor and freshness of appearance, so will your hair preserve its health, and will surely add greatly to your personal beauty, as it should do, for that is the purpose for which it was designed.

#### THE BEARD AND MOUSTACHE.

The beard, particularly the part called the *moustache*, is by many neglected as an encumbrance; but sanitary reasons forbid this carelessness. Why hair was appointed to grow on the lips and chin may be as difficult to explain as it is to give good reasons why some persons should cultivate both moustache and beard. The upper lip is intimately connected, through its nerves, with the eye; and a false stroke in shaving, or a dull razor, will draw tears or give sharp pains to the eyes, as many know by experience. In some,

the effect of constant shaving is to weaken the eyes; and physicians are often constrained to prescribe for patients with ocular affections: the wearing of a moustache, and the proposed remedy usually brings relief. Many ministers of religion are driven to brave public opinion in this matter by the difficulty with the eyes; and there are many more who ought to wear the appendage for the same reason, but are overawed by public opinion. The object of the beard is to protect the throat, which is much exposed and needs defence. This is so well understood that the growth of the beard needs no apology from its advocates.

But many men will continue to shave, which is an unnatural and undesirable practice. I therefore give the following directions, published by Mr. Mechi, of England, as showing the right way of doing a wrong thing:

"Never fail to wash your beard with soap and water, and to rub it dry immediately before you apply the lather, of which the more you use and

the thicker it is the easier you will shave.

"Never use warm water, which makes a tender face. In cold weather place your closed razor in your pocket or under your arm to warm it. The moment you leave your bed (or bath) is the best time to shave.

"Always wipe your razor clean and strop it before putting it away; and

always put your shaving-brush away with the lather on it.

"The razor (being only a very fine saw) should be moved in a sloping or sawing direction, and held nearly flat to your face, care being taken to draw the skin as tight as possible with the left hand, so as to present an even surface, and to throw out the beard.

"The practice of pressing on the edge of a razor in stropping it soon rounds it: the pressure should be directed to the back, which should never be raised from the strop. If you shave from heel to point of the razor, strop it from point to heel; but if you begin with the point in shaving, then strop it from heel to point.

"If you only once put away your razor without stropping it, or otherwise perfectly cleaning the edge, you must no longer expect to shave well and easy, the soap and damp so soon rust the fine teeth and edge.

"A piece of soft plate-leather should always be kept with the razors, to

wipe them with."

Boys and young men who desire to have fine, silky, complete, and handsome beards and moustaches, should never use a razor; nor should they use any of the many extensively advertised nostrums. As a rule, boys are so anxious to be men before their time that anything of which they may hear, as being likely to hurry growth (from putting on cream and letting the cat lick it off to shaving the skin where the beard ought to be), is sure to be tried, with an immense amount of anxiety as to the results. Boys, never be impatient about the growth of the hair on your faces. It will come in good time; and, if you do not use a razor, it will come to be an ornament well worth having, and waiting patiently for.

#### CHAPTER VII.

#### THE SKIN AND THE COMPLEXION.

There can be no outward expression of beauty without a healthy skin. Examined anatomically, the skin is found to consist of two layers of membrane, each being adapted to the performance of a particular duty.

The outermost of the layers is the scarf skin or epidermis, which is insensible, and serves to protect the sensitive true skin, and to dull the impressions of outside objects coming in contact with it, which would otherwise be too painful. As might be supposed from its situation and use the scarf skin is exposed to continual wear, so that its outer surface is (in longer or shorter time, according to its situation) removed, and presents a fresh surface, which in time similarly suffers. The whole thickness of this laver would in time be removed, were it not that the vessels beneath it, continually exuding a thin, transparent, glutinous fluid, renew it on its under surface. This fluid soon hardens into minute granules or globules, each of which is endowed with the vitality requisite for forming a part in the whole scarf skin. And thus, by the appearance of the fluid above the under surface, another layer of the required granules is being continually formed. raising the first layer of cells from the true skin; and this in turn goes through the same process, and is afterwards pushed forward a stage by another layer formed beneath it. In the meantime, the larger cells of the outer layer become dry, are flattened down, and finally form a pellicle or coating composed of thin scales. These scales, as we have already said, are worn off where the skin is exposed to attrition; and even when it is not, they are continually falling off, to be replaced by new ones, so that the scarf skin may preserve its uniform thickness. Nature, in removing the outer layer of these scales and replacing it with a new one, obviously intends to free the skin from impurities (which would clog the pores, induce diseased action in the finer vessels, and embarass them in the performance of their several duties), and to show us a means of preserving the skin in a

healthy state, fit to minister to our well being. This means is: Washing the skin in a proper manner and with proper materials.

Of these materials, the most common and most necessary is pure water, which should be used habitually at such a temperature as to give a sensation of slight coolness. If very cold, besides producing an unpleasant sensation, it roughens, hardens, and exposes the skin to unequal and undue action, both from the hands in washing and from the towel in wiping. And the reaction of the circulation of the blood, driven from the part by the cold, becomes too violent, and an unpleasantly rough and hard condition of the outer skin ensues, causing it to crack or chap, and laying the foundation of very troublesome sores.

On the other hand, water at too high a temperature has an equally prejudicial effect, by softening and detaching too many of the scales, leaving the scarf skin too thin and insufficient to perform its duties as a protector to the sensitive layer beneath; and the hot water, similarly to the cold, disturbs the circulation and induces the same chapping and the ugly eruptions.

Cleanliness of the *whole* body is required by all who desire to keep their skins in good order. Many persons are excessively neat about the face and hands, but never bathe the rest of the body. The reason why the face is most subject to spots, pimples, and similar eruptions, is that it is washed oftener; and thus the pores are kept open and the circulation is stimulated by the rubbing, so that the effete humors in the blood find a ready exit, and consequently crowd thither from all parts of the body, giving the skin of the face too much to do. A healthy person should daily cleanse every part of the body with water of a pleasant temperature, using soap once a week in connection therewith.\*

The great secret of acquiring a bright and beautiful skin lies in three simple things: Temperance, exercise, and cleanliness.

#### CHAPTER VIII.

#### THE MOUTH .-- THE LIPS.

A beautiful mouth belongs only to the possessor of a beautifully harmonious nature. A mouth perpetually contracted, as though about to say "No," or curled up with sarcasm, passion, or ill nature, or turned down

<sup>\*</sup> See also the chapter on "Air, Sunshine, Water, and Food," page 13, ante.

with envy and selfishness, cannot be beautiful even though its lips were chiseled like Diana's, and stained with the red of the ripest cherries. If a lady be anxious for her mouth to look charming, she must cultivate the good and beautiful in her nature, looking always on the bright side of things, and being buoyant, cheerful, and sunny, under all circumstances.

The vermilion color of the

"Lips that outblush the ruby's red,
With luscious dews of sweetness fed,"

depends upon the state of health. It is extremely unlikely, not to say impossible, that we can have fresh and rosy lips without enjoying pure health and having pure blood,—without leading a quiet, regular life, free from bad habits, turbulent passions, and vices.

All women should understand that paint can do nothing for the lips. The advantage gained by the artificial red is a thousand times more than lost by the sure destruction of the delicate charm associated with "Nature's dewy lip." There can be no *dew* on a painted lip, and there is no man who does not shrink with disgust from the idea of kissing a pair of painted lips; and no woman can believe that a man does not instantly detect if these beautiful features are painted.

The shape of the lips does not depend upon our own will, but on Nature, who produces variety in all things: to some she grants beauty, to others she denies it. But if the lips are defective, we may hide the deficiency somewhat by keeping the mouth in a position suited to their shape. The bad habit of biting and sucking the lips, and of wetting them with the tongue to redden them, produces an immediate effect; but it finally discolors them, and makes them dull and withered. The common habit of picking the lips when the skin becomes hard, and of pinching them, not only wounds them and makes them bleed, but puffs and swells them, giving them an ill-shaped and disagreeable appearance.

Too constant exercise of the muscles of the mouth soon causes ineffaceable wrinkles; and the habit of opening the mouth too widely, either in eating, laughing, or speaking, deforms and injures the lips. Grimacing will spoil a mouth, be it never so charming in shape, causing it to lose its beauty and freshness; while candor and the absence of affectation preserves to it its maiden attraction.

The passions have a singular influence on the shape of the lips. Anger makes them pale, indignation swells them, spite compresses them; but goodness calms and reddens them, and love renders them supremely beautiful.

The lips are liable to be chapped by cold weather, wind, and dryness. The best method to prevent this is to rub them gently with a little glycerine cream, whenever they are exposed to the influence of the air.

Many diseases may be contracted by the mucous membrane of the lips and tongue, and extreme care should be taken in kissing the lips of persons of whose perfect health there can be any doubt. The indiscriminate use of cups, tumblers, towels, or any such things, which may have been used by unhealthy persons, should be carefully avoided.

#### THE TEETH.

Good and sound teeth are absolutely necessary to health and beauty. A good set of teeth is one of the most desirable ornaments of "the human face divine." It produces a most pleasurable feeling in the beholder, and, as it were, prepares him or her for an introduction. It also preserves to the features their natural symmetry; and when the teeth decay this is destroyed. The teeth are equally important as forming an organ of articulation; but their most valuable office is, undoubtedly, the mastication of the food, and the preparation of it for the digestive action of the stomach.

There are many common practices which help to disarrange the teeth. The habit of cracking fruit-stones and nuts with the teeth exposes them to the danger of being broken off or loosened. Biting off thread or silk always wears the enamel of the teeth, and sometimes does greater mischief. When the teeth of one side of the mouth only are used in mastication, those on the inactive side are liable to accumulate tartar, and to decay.

Eating hot food, especially bread and pastry raised with soda, and imbibing hot drinks, will do as much towards destroying good teeth as anything known. Cold applications are also injurious; and the teeth should never be brought into alternate contact with hot and cold substances. The use of seasoned food, fermented liquors, and tobacco, is very detrimental. Metal toothpicks, especially pins, is highly dangerous. The custom of sucking the air through the interstices of the teeth with the tongue, in addition to being a disgusting habit, spoils the teeth quickly.

Well-formed, regular, and white teeth are valuable gifts of Nature; but negligence and want of cleanliness will soon destroy these beauties forever; while assiduous attention preserves them and assures their duration, and gives, even to indifferently shaped teeth a kind of beauty.

In caring for the teeth, the first object is to prevent the formation of tartar, and to take away, as fast as they are deposited, the particles which remain on them. To guard against the deposition, the food should be masticated with all the teeth at the same time; for those which are deprived of their proper exercise become incrusted after a time, and will, doubtless, eventually be destroyed. The use of slop food, and the swallowing of solid food without chewing it, also results in inaction and consequent destruction of the teeth.

After eating, the mouth should always be carefully rinsed with lukewarm water, to cleanse the teeth from the deposit left by the masticated food.

But small portions of food that become fixed in the interstices of the teeth cannot be got rid of by rinsing. Such pieces must be removed with a proper toothpick; the best possible one is a broad-pointed quill, and that should be used with the greatest care and nicety. Rinsing the mouth should always be done before going to bed and after rising; this should never be omitted.

Pure water, with perhaps a little neutral toilet soap rubbed on the brush, is all that is necessary to keep clean and brilliant the teeth of a person who cats the right kind of food, and otherwise lives hygienically and healthfully. When a powder is required to clean and whiten the teeth, there is none more simple, efficacious, and innoxious than charcoal powdered very fine. Its use should be immediately followed by rinsing the mouth out very carefully and thoroughly with water.

Tooth-brushes should be elastic and moderately hard in texture, with the hairs somewhat apart; for if they are too soft, or the hairs are too close, they form into a mass when used, and then they do not penetrate the interstices. A new brush that is too hard can be permanently softened by dipping once or twice into boiling water. In using the brush, the teeth should be rubbed upward and downward, as well as across; and the brush should be carried back to the last molar tooth, and not, as is too often the case, confined in its action to the teeth in front. A second brush, of suitable construction, should be used for the internal parts of the front teeth. Even stumps and tender teeth should be thoroughly brushed; however unpleasant the operation may be at the time, the result cannot be otherwise than beneficial.

When, however, the teeth are small and of a grayish color, which latter is a proof of want of thickness and solidity of the enamel, they must not be too much rubbed in cleaning, or subjected to the action of any acid, in the diet or otherwise.

Attention to the preservation of the teeth cannot be commenced too early. Children should be taught always to include their teeth in their daily ablutions. By early care in this particular, irregularity may be prevented, and a fine set of teeth insured in ninety-nine cases out of a hundred, if this attention be accompanied by judicious measures. Five dollars paid to a first-rate dentist for advice respecting a child's teeth when malformation or disarrangement is first noticed would generally be a wise outlay on the part of the parent. Let it be also remembered that the character of a child's food has much influence upon the teeth. Simple food will not generate tartar; while all heated food, spices, acids, or saccharine compositions (whether called bon-bons or any other fashionable name) will disorder the stomach and create a disposition in the saliva to deposit tartar. They will also cause toothache, and the little sufferer then endures a torture which

should only arise from natural decay or includence in the sensual gratifications which belong to maturity, inflicted, be it recollected, by the hands which ought to have sheltered it from harm. And the mischief does not end with the pain: in after life, all the mortification arising from having a bad set of teeth is usually attributed to the negligence or weakness of the parent.

#### THE BREATH.

If the breath be in the slightest degree unpleasant, and there is a certainty that this does not arise from the teeth, it must originate from a disordered state of the stomach or lungs. When caused by the teeth, the odor is putrescent, reminding of decaying animal tissue; when by the stomach, it is marked by the presence of the compound gas, sulphuretted hydrogen, which we are most familiar with in exhalations from rotten eggs; when from the lungs, the odor is of a sickening, sweetish character. It may also be produced from diseases within the nostrils, or from several of the causes combined. No person can be too attentive, or take too much pains, to avert this calamity,—for calamity it is. The fond husband turns with ill-concealed loathing from the treacherous salute, and the friend who has listened to the whisper of confidence will not again submit herself to the infectious atmosphere. This feeling of disgust is destructive alike to friendship and love.

Extreme attention to cleanliness of the teeth and mouth, a regular life, early hours, and wholesome food, can alone preserve the natural purity of the breath. Above all things, it must be remembered that the teeth cannot long continue sound if the diet be unwholesome or the digestion impaired.

Breath perfumes are sometimes used to hide or cure a foul breath; but the pure sweetness, resulting from health and cleanliness is far more entrancing and delightful than any artificial odors.

#### CHAPTER IX.

THE EYES, THE EARS, AND THE NOSE.

#### THE EYE.

Strangely complex in all its parts, and wonderfully adapted to the great purpose for which it was designed, the eye yields us enjoyment not only beyond description, but even, in its richness and fullness, beyond comprehension. Yet there is no organ which we possess that is so habitually

hardly dealt with, so ungenerously used in health, and so niggardly cared for in disease. We daily see the grossest carelessness of those laws of hygiene which direct us how to preserve unimpaired the powers of the eye so long as those powers can be expected to be retained. And when diseased, delicate as our instantaneous sensations tell us the organ is, none is more liable than it to be committed to the pretensions of a quack, to the virtues of a nostrum, or to the chance advice of a friend.

Damp, foggy weather, the reflection of a bright sun, intense cold, dusty or sandy wind, reading on cars in motion, examining minute objects in a stooping posture, reading by candle or gas light when the light falls directly upon the eye, sitting in front of a blazing fire, the wearing of eye-glasses when they are not necessary, the wearing of colored glasses, the wearing of veils (especially of a light color), sudden\* transition from darkness to light, the use of tobacco, intemperance, unhygienic food, licentiousness: all these tend to weaken the sight and injure the eyes.

The most desirable and most pleasing light for the eye to work by is a light from the north. Such a light is sought for by all artists arranging their studios; and when this light enters through an elevated window or a skylight, it is most suitable for any work that requires effort on the part of the eyes. It is advantageous, also, to wear a shade over the eyes, in order that the light may fall only on the paper written on, the book read, or the canvas painted. Light should always fall on the object looked at, and not on the eyes. Care should also be taken to have the work or writing-table placed in such a manner as not to receive light from different points. The light which comes from behind the worker is suitable, provided that it does not fall on objects which reflect too much. Too strong a light, direct or reflected, over-excites the organs of vision, weakens the sight, and finally produces blindness. Nothing, therefore, is more injurious to the sight than working or reading by the glare of a very strong light in front of a blazing fire.

That exercise of the eyes may not be prejudicial, these delicate organs should not be subjected to a very bright or a very weak light; they should not be continually in action, nor should they be exercised upon very small or very distant objects. Nor should they be left too long inactive, or be too long withdrawn from their natural use.

As a general principle, the eye, in common with all other organs, is more or less affected by the health of the system at large. It more immediately, however, and greatly participates in any affection of the brain, or any undue determination of blood to the head. Such maladies, if violent, should at once come under the care of a physician; as, if gradual in their invasion, they are not liable to be detected by the sufferer himself until the mischief is done. This is mentioned here, not so much in the hope of

enabling a patient to discriminate the cause and to remedy the difficulty himself as to caution him to be careful, in any impairment of sight not accounted for by age or by some evident affection of the eye, to put his physician into possession of all such information concerning his habits and pursuits as might point out, if such exist, the influence of the state of the brain upon the disease. This suggestion seems more urgently necessary from the fact of the great prevalence, for the past few years, of a disposition to great sensibility in the eyes, in many instances in such a degree as to entirely preclude their use in any employment such as reading, writing, or sewing, Wonder as to the cause of this frequency is often expressed; but the phenomenon is fully explained by our habitual errors in living, the high temperature of our houses, sitting before the intense glow of coal fires, want of outdoor exercise, wearing thin shoes, reading badly printed books, too close application to study, constant nervous excitement, and, in general, by over-stimulation of mind and body without any hygienic correctives.

Spectacles, though intended to benefit the eyes, are fruitful sources of harm to them, whether used with tinted glasses for the protection of too sensitive organs or with lenses for bettering near or far-sightedness. In near-sightedness (myopia) the rays entering the eye are converged too abruptly, so that the image of the object viewed, instead of falling upon the retina falls in front of it. Concave glasses are therefore required to disperse the rays to just such a degree as will precisely balance this too sudden convergence. In far-sightedness (prestyopia) the reverse is the case, and the rays are not brought to a focus abruptly enough: the image falls behind the retina, and therefore convex glasses are required. Such lenses will approximate the rays more abruptly, just enough so, indeed, as to counteract the effect.

In fitting glasses to the eyes, it is evident that some knowledge and judgment is necessary, that the point of accuracy be ascertained, and that the powers of the lenses err neither on one side nor on the other; for if the glasses be too convex or too concave, harm is inevitably done. It is much to be regretted, therefore, that this fitting defective eyes with glasses is left so much to simple opticians, possessing perhaps great skill in the mechanical details of their art, and even in some instances great knowledge of optics as a science, but not adding to these an acquaintance, to some extent at least with the proper science of an oculist.

Of all the materials used for lenses, crown glass is preferable to flint, on account of its superior hardness, its entire want of color, and its non-decomposition of the light. Rock crystal decomposes, or refracts, the light very much, and has an easily injured surface. Scotch pebbles are unobjectionable, except on account of their cost, for which they have no com-

pensating advantages. They do not become scratched, it is true; but good glass, if taken care of, has the same merit.

The question as to when persons ought to commence the use of spectacles is very important, and there are daily instances of error, in each direction, in attempts to answer it. Some persons, as soon as they find that their eves are not so good as they ought to be, resort to glasses, which soon have to be exchanged for more powerful ones, and the defect in vision becomes rapidly greater. On the other hand, others, desirous of escaping the trouble, uncomeliness, or other disadvantages of glasses, go about screwing up their eyes and making facial contortions to obtain a little temporary improvement in their vision; or they philosophically content themselves with seeing only what is within a six-foot radius, ignoring the rest of the world. Both classes are at fault. If the vision does well for most purposes, in viewing near or distant objects, as the case may be, but is occasionally found deficient, upon some particular necessity, a double eyeglass should be used for the emergency. But if these cases cease to be exceptional, and it is found that the eve has to be habitually strained to meet ordinary demands upon it, it is better to submit at once, and adopt spectacles. At the commencement, glasses of the feeblest powers should be used, and they should be employed of a gradually increasing strength; not more rapidly so, however, than is absolutely necessary. As a guide to the judgment in this, I may say that, when concave glasses are used, they should not cause objects to appear more distant and smaller, but simply clearer and more distinct; and convex glasses should not magnify, but merely enable the person to hold his book near and to define, more readily and perfectly, the form of the type.

THE EAR.

The habitual care of the ear should never be overlooked. The outer ear should be well cleansed, and the passage wiped out every day, as far as the tip of the little finger, covered with a soft wet rag, can reach, but no farther. The practice that some persons have of inserting still deeper the point of an ear-pick or other instrument, is, to say the least, perfectly unnecessary, and may cause a hurtful irritation of the deep-seated structures, if not irreparable injury to the delicate auditory apparatus.

Some persons are often seen endeavoring to remove the wax from the ear with the head of a pin. This ought never to be done. First, because it may cause a rupture of the ear by being pushed too far in, or so far that it may grate against the drum, and excite inflammation, in which case an ulcer may be caused which will eat the parts away, especially if the patient be of a scrofulous constitution. Secondly, hard substances have often slipped into the ears, and caused the necessity of painful, dangerous, and expensive operations to remove them. Thirdly, the wax of the ear is secreted by Nature to guard the entrance from dust, insects, and unmodified

cold air; and when it has served this purpose it becomes dry, scaly, and light; and in this condition is easily pushed out by new formations of wax within. If the wax collects in the ear so as to obstruct the passage, as it is sometimes liable to do from an increased secretion produced by cold, etc., it should be removed by syringing the ear out with warm water, having on the previous night dropped two or three drops of glycerine into it, to commence the softening process. The syringing must be continued for some little time, as the wax has to be considerably softened before it can be loosened and carried out by the current. In cases of sudden deafness, unattended by any disease or pain, the obstruction of the ear by wax may be believed to be the cause. I have known several instances in which the affliction has been endured for years without its origin being suspected; and the relief, by the simple means just mentioned, was as sudden and effectual as it was welcome and unexpected.

The common practice of stuffing cotton-wool into the ear for every trifling affection should be avoided; it is apt to bring on a delicate and irritable state of the organ, and is, in reality, very seldom necessary.

In conversing with deaf persons, it is important to know that their ability to hear does not depend so much on the loudness as on the clearness and distinctness with which a person speaks, and also upon the proper musical pitch adopted in using the voice. Taking care as to these points, a conversation may often be carried on with one hard of hearing, at a very little expenditure of breath and effort; while if they be disregarded, to voice may have to be much exerted, and, after all, be very nearly inaudible.

#### THE NOSE.

While cleanliness of the nose is a necessity, frequent wiping, snuffing, blowing, and picking, should be avoided; and especially should children be kept from these practices, as from them, long continued, the organ assumes an unnatural and undesirable shape.

An irritation of the nostrils is a certain indication of some internal disorder; and the discharge from the nose is never excessive if the patient be in good health. If the latter becomes troublesome in quantity, it is owing either to worms, dyspepsia, chronic catarrh, or to some more serious disorder. Persons who are subject to frequent "cold in the head" must be careful in treating this prominent feature, lest they altogether destroy its symmetry. The filthy habit of snuff-taking invariably leads to various disorders and deformities of the nose,

One disfiguration of the nose can be remedied. It is that caused by the feature leaning more to one side than to the other of the medial line of the face; and the cure is effected by an instrument invented by a London surgeon, the occasional wearing of which will return the nose to its natural place. The usual cause of the crookedness is that the patient wipes or

blows the nose always with the same hand, and therefore pulls it frequently in one direction. The trouble can be avoided by reversing the direction, which will be done unconsciously by using the other hand.

Large, fleshy, and unsightly noses, can be reduced in size by using a spring and pad, so constructed as to compress the artery by which the nose is nourished; this contrivance should be worn at night, and, when convenient, in the daytime also. This idea originated with a Paris surgeon.

Red noses, when they are not caused by the use of alcoholic liquors, may come from long exposure to heat, as in the case of cooks and those persons who are much in the sun. But more frequently this trouble arises from a debility of the minute vessels of the skin. Their coats become relaxed, and allow the blood to accumulate in their folds. The proper treatment is to remove the debility by gentle friction and cold bathing of the part, and to tone up the whole system by proper diet, exercise, etc.

#### CHAPTER X.

THE NECK, THE HANDS, AND THE FEET.

#### THE NECK.

The bad habit of wearing too tight collars and neckerchiefs, if not the sole cause of swelling of the neck, contributes much to produce it. This swelling not only destroys all beauty, but, if it increases, it will resemble the disfigurement produced by the goitre.

In moments of passion, such as anger, the neck swells and the muscles show themselves. When they become very apparent, as in thin persons, like so many tightly drawn strings, the roundness and beauty of the neck are lost. If this defect be a consequence of general meagreness, it will be necessary to have recourse to the proper regimen for acquiring plumpness. If the swelling arise from a habit of raising the voice too high in speaking (which, with the temper that causes this, is very frequently the case), long discourses, loud exclamations, and singing, must be avoided. If that be not sufficient, the only remedy left is to wear high dresses, and so conceal the defect.

#### THE HANDS.

There are few parts of the person which require more care and attention than the hands. The skin of the hands and arms, though of a firmer tissue than that of some other parts of the body, is subject to much dilatation and

contraction. It becomes numb by cold, dried by the wind, tanned by the sun, and swollen and expanded by heat. The use of gloves, therefore, is an adjunct to the beauty of the hands; and those of kid, especially, tend to preserve the softness of the hand. Perspiration of the hands is very unpleasant, as it soils any work we may be doing, and stains the gloves. Cleanliness and sprinkling the hands with orris-root will help counteract it.

If the hands are washed in very hot or very cold water, or are exposed to the air immediately after being washed, they are liable to become wrinkled and chapped. Cleanliness and attention to preserving the hands and feet from intense cold or heat, and particularly from sudden changes of temperature, from too much moisture, and from very hard work and other causes of severe compression, are the best means of preventing all such troubles.

Warts are troublesome and unsightly things, and the best way of getting rid of them quickly is to soften them by steeping the hands for half an hour in warm water, and then taking off the surface of the wart (which will be white and insensible), which will not make it bleed or cause the slightest pain.

The thin membrane which covers the bottom of the nail frequently grows up too far, and hides the little white semicircle which makes a beautiful nail so much resemble the petal of a rose. This can be prevented by frequently pushing back the skin, from the bottom of the nail, with the thumb.

A beautiful arm and hand require well-shaped and very clean nails. They should be cut frequently, a very little at a time, and always in an oval shape, as this gives a more slender appearance to the fingers. They should be cut to a level with the tips of the fingers, which they are intended to preserve. If left too long, they are liable to break; and if too short, they will not sufficiently protect the fingers from shocks and friction, which may injure the tips.

The nail-brush should be full, broad, and soft. It is to be rubbed on a cake of soap, and the nails should be brushed thoroughly, and the slight inequalities in their length and shape removed.

Biting the finger-nails is a very bad habit. It is contracted, generally, while young; and those who have acquired the practice are slow to drop it, but continue it, vulgar as it is, up to manhood and womanhood. It is a sign of a morbid temperament which cannot long remain at rest. Appeals to pride of appearance or to sense of propriety have no avail to nail-gnawers; and the only hope of success in breaking them of such a habit is to compel them to dip the tips of their fingers every night, on retiring to bed, in a strong solution of aloes, a drug so intensely bitter and offensive that a taste

of it, even in sleep, generally obliges them to desist. If that experiment fails, apply strong wine of antimony in the same manner: this, or a solution of ten grains of sulphate of zinc in a teaspoonful of water, will speedily produce nausea, and even vomiting. Mothers, follow up your nail-biting children, even if they vomit six nights out of seven. It is the only known method of saving their fingers from deformity. It is better for them to suffer a little sickness now than to go through life mortified at the sight of their mis-shapen, distorted members.

#### THE FEET.

The feet should be washed every morning, like the rest of the person. This salutary custom is too much neglected. Doing this will preserve the beauty of the feet, keep them from blisters and corns, and especially from perspiration, which inattention to cleanliness renders obnoxious. are careless in the keeping of the feet: if they wash them once a week they think they are doing well. They do not consider that the largest pores in the human body are located in the bottom of the foot, and that, through these pores, the most offensive matter is discharged. They wear stockings from the beginning to the end of the week without change, and these become completely saturated with offensive water; and by such treatment of the feet ill health is generated. The pores become absorbent instead of repellent; and the fœtid matter, to a greater or less extent, is taken back into the system. The feet should be washed every day, and stockings should never be worn for more than a day or two at a time.

The nails of the toes ought not to be rounded like those of the fingers. but should be cut squarely, to prevent their growing into the skin.

The slightest perspiration of the feet is almost always accompanied by a disagreeable odor, and the greatest care should be taken to prevent this becoming unduly offensive. The feet should be washed, night and morning, with lukewarm water; the stockings should be changed every morning; and a sole of rough cotton cloth should be worn in the shoe, to absorb the perspiration. If this sole be sprinkled with lavender, and frequently changed, it will greatly help towards a cure.

Persons subject to blisters may prevent them by rubbing the feet, after

washing, with a little glycerine.

The hardening of the skin, commonly called a bunion, is a drying of the cuticle on the joint of the toe, and is caused by wearing shoes either too short or too tight. A bunion is difficult to get rid of when once formed; but it may be materially reduced by wearing easily fitting shoes, putting an india-rubber ring on the spot to prevent pressure from the shoe; and poulticing the affected place constantly.

Corns are originated only by continued pressure on the foot, by wearing too small or ill-fitting shoes. At first, they are produced on the outer skin only; but by gradually thickening, they extend to the true skin underneath, and even, in extreme cases, to the subjacent muscle. To prevent these troublesome formations, wear woolen stockings, and be careful that there is no local and permanent pressure on any part of the foot. To cure them, soak the feet for half an hour nightly in hot water in which two tablespoonfuls of soda have been dissolved. After each bath, carefully scrape away as much of the corn as can be removed without effort. Soft corns may be removed by taking a piece of cotton just large enough to fit comfortably between the toes, spread it flat, and sprinkle prepared chalk over it; then roll it up, and place it between the toes where the corn is. The cotton and chalk absorb the moisture from the toe; and by keeping the corn dry, soon effect a cure.

#### CHAPTER XI.

MARKS, ETC., THAT ARE ENEMIES TO BEAUTY.

#### SUNBURN.

The coloring matter of the skin is part of the great design which extends throughout Nature, and adapts all things, even the most apparently insignificant, to the needs and circumstances of the situation. It is a rule that the skin of man is fairer as the climate in which he lives is colder; and the same rule of proportion affects the hair of animals and the petals of flowers. As we travel nearer to the tropics, the richer and deeper these tints become.

Frequently, however, the complexion becomes altered by atmospheric influence. Great vicissitudes of temperature are particularly obnoxious to fine complexions. In this country, we have during the summer a sun equaling in intensity that of the tropics, which stimulates the skin to activity, and so induces a great increase in the development of coloring matter; while in winter, bleak winds and an exceedingly depressed temperature embarrasses this action, and rapid blanching is the result. Much can be done, indirectly, to protect us from these influences, by stimulating the circulation with exercise in the open air, and by properly performed bathing; by modifying the often too high temperature of our houses in winter; and by insuring a better supply of fresh air by day, and, more particularly, by night.

#### FRECKLES.

The common discolorations, called freckles, are of two kinds: Round or irregularly shaped amber dots of various sizes, which occur chiefly in persons of light complexion, and are more particularly associated with auburn and red hair; and variously colored spots—amber, yellow, and pale green—which may appear on any complexion. The first are generally developed during summer, and are called sun freckles; the latter do not belong to any particular season. The first disappear with the exciting cause, at the approach of winter; the latter depend upon constitutional causes, and are more persistent.

Many washes and lotions are sold as remedies for freckles, but they are all empirical, and more or less hurtful; and when they do remove them, the cure is only temporary, and the freckles will return just as sure as the skin is there for them to return to.

#### PIMPLES.

These excrescences are caused by obstructed pores, arising from imperfect circulation, and, more particularly, from gross living, such as the use of hot tea and coffee and sweetened and greasy food, which clog the action of the liver, and so the waste matter from foul blood is carried to the skin to be thrown off, naturally to that part of the skin which is most frequently cleansed, viz., the face. Therefore it is that these eruptions, though they deface the skin, are always proofs of the vigor and vigilant activity of the system in sending to the surface matter which would be injurious to health.

In the treatment of pimples, cosmetics—it matters not how loudly their merits may be vaunted—are of no use. The remedy, and the only remedy, which gives a perfect cure, is to abstain from the cause,—from tea, coffee, chocolate, improper food, late suppers, and to keep the whole body clean by the daily bath.

#### WRINKLES.

These enemies do not generally appear until old age approaches, unless they are brought on by dissipation and disease, the latter being the most rapid producer of wrinkles. By attention, a person with a good constitution may prevent the exhibition of these heralds of decay for years after the time when they usually appear, for they are not so certain an indication of old age as they are of wear and tear of the constitution. In fact, we do wrong in applying the term "old age" to a certain number of years; the approach of this period should be calculated, not by time but by the ravages of decay. Many persons, from disease, or more often from profligacy, are old at thirty; while others, at sixty, have the animal spirits and activity of natural growth. Wrinkles are occasioned by the obstruction or obliteration of the finer blood-vessels; when this occurs, the larger veins

are overloaded and protrude, as may be seen on the backs of the hands of very aged persons; while wrinkles in other parts are produced by the absence of the blood, caused by the same obliteration of the small blood-vessels, or by the similar loss of action of the small pipes which convey to the skin the moisture which keeps it smooth, soft, and flexible. To prevent these most undesirable appearances, and, when formed, to assist in their removal, use the daily bath, with after thorough friction with the palms of the hands, and unstimulating food; go "early to bed and early to rise"; lead an unexcited, equable life; and constantly observe the rule, "Do unto others as you would they should do unto you." These will most assuredly ward off the tell-tale marks until a good old age; and when they do come, as they will come inevitably to all of us who reach the three score and ten allotted years, they will inscribe on us the record of a life well lived, and so be in their appearance and expression, a pleasure to look upon.

#### YELLOW APPEARANCES

sometimes present themselves under the skin, frequently upon the neck and sometimes upon the face. They occur in the form of patches of various tints, and are called variously "saffron spots," "sulphur spots," and "liver spots." They do not differ in their nature from freckles, but they are not always permanent. They often appear suddenly, under the influence of a general disturbance of the system. They are attended with some degree of itching, and they fade away when the cause which excited them is removed.

#### MOLES.

The common mole is situated in the middle layer of the skin. It is often elevated above the surface, and then the natural down of the skin is changed into a tuft of hair. Although moles usually have their origin before birth, they sometimes appear at puberty or in after life; and some moles that have existed at birth disappear at puberty.

To remove them, very slightly moisten a stick of nitrate of silver, and touch the moles; they will turn black and sore. Do not interfere with them; they will dry up and fall off like scabs. If they are not entirely gone, repeat the operation. It is well to understand that the application of remedies to remove them is often attended with dangerous consequences; and the less they are trifled with the better, except by the advice of a surgeon.

#### MOTHERS' MARKS (Nævi Materni).

These marks may appear on any part of the body, but they usually come on the neck, face, or head. They are usually masses of blood-vessels, veins when the blue color prevails, and arteries when the bright red predominates. They should never be tampered with, except under medical advice.

#### TETTER, OR RING-WORM OF THE FACE.

This is a totally different disorder from the ring-worm of the head, and is occasioned by a disordered stomach, which, vitiating the blood and deranging the functions of the skin, causes the appearance of this disagreeable humor. The cure is the regulation of the entire system by attention to hygienic rules.

#### WARTS.

Warts are formed by the small arteries, veins, and nerves, which, united together, take a disposition to grow by extending themselves upward, carrying the scarf skin with them, which, thickening, forms the excrescence called a wart. They are a great disfigurement to the hands, but can be easily removed. One method is to saturate a little water with common washing soda: wash the warts with this for a minute or two, and let them dry without being wiped. Put the water away for future use, and repeat the application frequently; it will take away the largest wart. Another plan is to pass a pin through the wart; apply one end of the pin to the flame of a lamp or gasburner, and hold it there until the wart fires under the action of the heat. A wart so treated will leave. Warts are generally only temporary troubles, and disappear as the patient grows older.

#### FLESH-WORMS.

The pores of the skin, and especially of the nose, are very frequently filled with specks of a black, deep gray, or yellowish color. They disfigure the face very much; and when they exist in very great numbers, are the cause of much unsightliness. They are minute corks, if the term may be used, of coagulated lymph; and if the adjacent skin be squeezed, the small particles will come out in vermicular form. They are vulgarly called "worms," many persons believing them to be living creatures. They may be got rid of and prevented from returning by washing with tepid water, followed by friction with a towel, and then applying, with a soft flannel, a lotion made of three ounces of cologne and half an ounce of liquor potassæ. The use of fat food, sweets, cosmetics, face paints, and powders, should be avoided.

#### CHAPTER XII.

#### COSMETICS AND PERFUMERY.

Coloring, enameling, or even powdering the skin, is always attended with more or less danger to the general health, as well as harmfulness to the skin on which they are used. There is not a cosmetic used, no matter how highly it may be extolled, that is not more or less poisonous; and numberless cases of disease are the direct results of the use of these direful compounds, which has unfortunately become so general throughout the country. If those who employ these meretricious aids fully understood their character and effects on the health of the whole body, they would, I am sure, hesitate much before they made them part of their toilet preparations in general use. It has been often shown, by scientific investigation. that the nostrums which are most celebrated for their beautifying properties are those which are most virulently poisonous. The best cosmetics, and the only ones used by women having good, ordinary, common sense, are healthful food, pure air, plenty of exercise and sunlight, going early to bed. and clear consciences. These may give you a brown complexion instead of the silly and good-for-nothing white which some persons seem to think so desirable; but your pains and aches will be fewer, and there will be, in your features, honesty and guilelessness, much better and more desirable than the brazen impudence which stares at us daily from the faces of the semi-galvanized corpses which we meet in fashionable salons or on crowded promenades.

Some time ago, the Board of Health of New York directed their chemist, Dr. C. F. Chandler, to make analyses of the different preparations for the complexion and hair, for which there is a popular demand. It will be noticed, from the results of these investigations, herewith published, that nearly every one of them contains lead, in greater or less quantity. In fact, the necessity for the analyses arose from the discovery of several cases of lead palsy in New York city. The table shows the quantities of lead and other poisons in each fluid ounce:—

Perry's "Moth and	Freckle Lotio	n," Corr	osive sul	blima	te, .		3.61	
do do	do	Sulp	hate of a	zinc,			4.25	
do do	do	Mer	cury, lea	id, bi	smuth	1, .	a trace.	
"Balm of White Lil	lies," Carbolat	e of lime	,		. a l	arge a	amount.	
"Enamelin," for the	e complexion,	Oxide o	f zinc, .		41.14		33.02	
Hagan's "Magnolia								
Laird's "Bloom of	Youth,"	do	do .				169.00	
"Eugenie's Favorite," Carbonate of lead,								
Phalon & Sons' "Sn	ow-White En	amel," C	Carbonat	e of	lead,		186.67	
Phalon & Sons' "Sr	now-White Or	iental Cro	eam," de	)	do.		246.00	

The practice of using these preparations is as pernicious as it is disgusting. The seeds of death or paralysis are hidden in every pot and bottle of these mixtures, which are popularly supposed to be not only innocent but even to possess the virtues of the undiscovered fountain of perpetual youth. Some of the persons who use them will suddenly have a severe illness; others will drop suddenly, with their features twisted on one side or the capability of using their limbs gone; others will die outright, no one guessing why. And the effect of these ghastly mixtures cannot be predicted; what gives paralysis to one sufferer may kill another at once. The only safety lies in having nothing to do with the baleful trash.

These remarks apply with equal force to hair-dyes and nostrums sold for the purpose of "restoring" the color of the hair. They, also, are nearly all deadly poisons, highly injurious to the health when applied to any portion of the body, even in minute quantities. The following table shows the quantity of lead in each fluid ounce of fifteen of the most popular

hair-dyes:-

	Clark's "Distilled Restorative for the Hair,"	0.11
	Chevalier's "Life for the Hair,"	1.02
	"Circassian Hair Rejuvenator,"	2.71
	Ayer's "Hair Vigor,"	2.89
na	Professor Woods "Hair Restorative,"	3.08
	O'Brien's "Hair Restorer America,"	3.28
	Gray's "Celebrated Hair Restorative,"	3.29
	Phalon's "Vitalia,"	4.69
	Ring's "Vegetable Ambrosia,"	5.00
	Mrs. S. A. Allen's "World's Hair Restorer,"	5.57
	L. Knittel's "Indian Hair Tonique,"	6.29
	Hall's "Vegetable Sicilian Hair Renewer,"	7.13
	Dr. Tebbett's "Physiological Hair Regenerator,"	7.44
	"Martha Washington Hair Restorative,"	9.80
	Singer's "Hair Restorative,"	16.39
		0)

Some advertised preparations for the hair do not contain lead, but produce the change of color with nitrate of silver; this does not poison the system, but it crisps, dries, and destroys the hair.

The lead contained in the above-named mixtures is absorbed, when used on the hair, by the skin, and is thence conveyed to the different organs of the body; and it so effects its work of destruction by gradually poisoning the victim, producing painful diseases which, sooner or later, result in death. A vast amount of neuralgic and palsied misery comes from such poisoning; and it is said that congestion of the brain and premature death is not unfrequently produced by the use of such hair-dyes.

"Gray hairs are honorable," it has been said; and we add, "and healthy," to the old and true proverb.

#### A CIRCULAR

#### DISCRIPTIVE OF A GOOD BOOK

# THE SCIENCE OF A NEW LIFE,

By JOHN COWAN, M. D.

This is a new Physiological Work of Standard and Permanent value, for which active and experienced Agents are wanted in every Town and County of the United States. The book is one that should be possessed by every man and woman, and to this end it will be our endeavour to circulate it very extensively.

If you are in want of a good paying employment we are certain you can not take hold of anything that will give you such good returns as will canvassing for the "Science of a New Life." It is comparatively an easy book to sell, because it contains so much that excites peoples curiosity and interest, and just such a vast fund of information, as men and women are continually trying to be informed upon. Another circumstance makes the book an easy one to take orders for, is the magnificent chromo we give to every subscriber, as fully menone to take orders for, is the magnificent chromo we give to every subscriber, as they interiored on next page. And yet another assistance to a rapid sale, is the fact that we supply in any quantity the twelve page circular, enclosed in the outer pages of this circular "A Book you Want". With the handsome chromo and this circular a deaf and dumb man could canvass for "The Science of a New Life" and make a success of it. We could give copies from the letters (on file at our office) of successful canvassers, recording how they have taken ten, fifteen and twenty orders a day, but space will not permit. We do not overreach the mark when we assert that any agent who goes at canvassing for this book, as he would go at a days work of manual labor, will easily average from \$30 to \$50 a week profit. We have so many agents that are making these amounts that we feel willing to guarantee not less than \$30 a week to any man or woman who takes hold of the agency with the purpose and will to make a thorough success of it.

Another fact to be noticed, is that "The Science of a New Life" is not sold in the book stores, but only by our duly authorized Agents and by the Publishers, to whom orders should be addressed, when it is not convenient to secure a copy from one of our agents. should be addressed, when it is not convenient to secture a copy from one of our agents. The prices of the different editions of the book will be found on the fourth page. It might be well to mention just here that in no instance is a single copy of the book sold for less than the retail price. We mention this because many send for our confidential circulars, with the hope of getting a copy at agents prices, whereas the agent himself has to pay full price for the first copy, besides an additional sum for the "outfit". And so we ask of you not to send for a confidential circular unless you realy desire an agency.

When applying for an agency, mention, if you have had any experience in canvassing, and the towns or county you want, and the confidential circulars, with full particulars will be sent to you.

In mailing money, (to avoid all possible danger of loss) send it in a registered letter, or by a Postoffice money order. When sent otherwise it is entirely at the risk of the sender. Give your name, town, county and state plainly written, without flourish, and address

> COWAN & COMPANY. 139 Eighth Street, (near Broadway,) NEW YORK CITY,

#### A FEW EXTRACTS FROM AGENTS LETTERS.

To convince applicants of the popular selling nature of "The Science of a New Life," and how easy it will be for any person who takes an agency to clear from \$30 to \$50 weekly, we herewith append a few short extracts from the very many letters of agents, we have on file at our office.

CLEVELAND MINE, OHIO.

SIRS:—I enclose \$18 for ten copies of "The Science fa New Life". I got the book and "outfit" this noon, nd went out the same evening canvassing. I was out of a New Life". I got the book and outlet and went out the same evening canvassing. I was out an hour, and got eleven names. I think if I do as well every day, you will have no cause to complain; &c. &c. E. W. ALLEN.

Dublin, Ohio.

Gentlemen:—Enclosed find report for two weeks; I have been very unwell for the past two days, or I would have taken more orders. Enclosed is order for 48 books, also draft No. 2045 on Jay Cook & Co., New York, for \$87.30. I deliver these books by the last of September; the next delivery the last of October.

Mag. H. A. CODEN. Mrs. H. A. COREY.

Suso. Depot, Pa.

Dear Sirs:—I wrote you from Montrose yesterday; I at Montrose I secured the names of three of her most prominent men—the only ones I solicited. Our success, thus far, is very gratifying. The work is meeting with almost universal favor among the more highly educated, which gives us reason to think it will also among the middle classes; &c. &c. . Most truly yours, MALLORY & CARPENTER.

STEWARTSVILLE, VA. GENTS:—Please excuse me for not reporting sooner;
I did not think it was necessary to report so often. Yet I did not think it was necessary to report so often. Yet I have not been idle. I have canvassed about half of the territory you assigned me, and have got, up to this date, three hundred and thirty-six (336) good and responsible subscribers. I took your plan for it, not to pass a house without calling. I think it best to get partly through canvassing before I deliver any of the books. I think I can get through by the first of March, at at any rate I have agreed to deliver them between the first March and the first of April: I hope by that time to have five or six hundred subscribers. I shall, in future, report oftener. The ten copies I sent to you for shortly after receiving my outfit was to supply some of my subscribers. oftener. The ten topics schill by work to subscribers that were moving west. You seem to think this is hard work to sell, but I beg to differ; &c., &c.

Yours very truly,

A. R. SMITH.

LOGANSPORT, IND.

GENTLEMEN:—Outfit "Science of a New Life" received. Been to work one and a half days and have done extremely well. Enclosed please find order No. 1 with draft in your favor of \$55.30 currency, amount of bill.

Respectfully,
P. F. KESSLER.

Prairie City, Oregon.

Sirs:—I received your book and outfit, and was delighted on looking through "The Science of a New Life." I think it is the best book I ever read in my life, and I am certain I can do well by selling it in this county.

Yours respectfully,

DEAR SIRS:-I received your circular a short time

Dear Sirs:—I received your circular a short time ago. I have had considerable to do with canvassing in my lifetime, and have sold a great many books, but yours promises the best yield of any I have seen yet, and I will be greatly rejoiced to become one of your agents. I could not do much before June, and then I can travel over a good portion of country. I have seen men who could not sell one book in a county, I might say, and I went over the same ground and sold the same book at almost every house; &c. &c.

Yours truly, BEN. F. RISH.

BELLEFONTAINE, OHIO.

DULUTH, MINN.
GENTLEMEN:—Enclosed please find draft for \$18.60 accompanying my first order for books. I was not until yesterday that I could possibly commence the work of canvassing, and so far the book seems just the thing. I have twelve names of the first men of the place, as a start; &c., &c.

Yours truly,

W. M. BALL.

GAGETOWN, N. B. CANADA.

DEAR SIRS:—I received your letters and outfit Jan'y 29th and was well pleased with 'The Science of a New Life,'' I think it the best book I ever read in my life, and I am certain I can do well selling it in this connty. Though I have been sick, I have seventeen (17) orders to date \*\*\*\* I shall send for a box of books soon.

FREDERICK L. WILLIAM.

Centleman:—Yours bearing date of the 11th inst. is received. I have now ninety three orders. I think I can get quite a number more in Lyons. These are all within the corporation as I have not been outside. The course I adopted was to write down thirty of the most influential mens names in the village and proceeded to get their orders of which I took all but three. After this I made a list of those I thought I could get easily and did succeed in getting them nearly all. I then proceeded to canvass the ballance. I think I can get fifty more orders in Lyons yet \*\*\*\*\*. N. E. CADY. Lyons, N. Y.

WILLIAMSPORT, PA.
GENTLEMEN:—I trust you will excuse me for not doing more last week. I could only get a chance to canvass about two hours and got eight subscribers\*\*\*\*

GENTLEMEN:—It is now one week since I received the sample copy and subscription book of "The Science of a New Life." \*\* \*\* I have read it carefully and pronounce it the best work I have ever read upon the white it treats of and as how a stand about he will be a stand abo subject it treats of and as above stated, although having subject it treats of and as above stated, attnough having but little time, have met with good success as far as I have prosecuted the work. I have now sixteen subscribers for the work in cloth and three in leather.

Very Respectfully yours,

G. D. HESTER.

We have scores of letters on file containing extracts like the above, in praise of the good selling quaities of this book, and to any person desiring an agency, who can conveniently call at our office, we will take great pleasure in allowing them to read them. -

In ordering outfit, give your nearest express office.

COWAN & COMPANY,

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You are kindly and respectfully asked to carefully read the pages of this circular—it will interest and fully repay you—and to keep it unsoiled until the agent again calls.

Auch in Deutsch vorräthig.

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Subscribers will please notice "The Science of a New Life," is not sold in the book stores, (and never will be) but only by our duly authorized canvassing agents, and as you may never again have the opportunity to secure a copy you should subscribe now.



## A FEW WORDS TO THE READER.

None know better than do the Publishers of "The Science of A New Life," that you are too often annoyed and importuned by canvassing agents to subscribe for books on every variety of subjects—books that only too often embody trash, and are simply got up to sell.

This book differs from any that heretofore has been offered by canvassers in that it is of sterling and permanent value, and that its pages contain information of great and vital importance to every man and woman—information that if heeded will save to the subscriber and reader, in health and growth into a perfect manhood and lovable womanhood, a thousand fold the price paid for it.

You must in no wise confound this book with any of the many incomplete, trashy books of nearly a similar nature, that are being canvassed for, as "Physical Life," "Talks to my Patients, etc., etc. This book by Dr. Cowan, contains ALL that is needed to be known on the subject and covers the whole ground. Nor is it to be confounded with quack doctor books of a like nature, as "Medical Sense," "Home Talks," etc. These books you should spurn whenever offered, and it is astonishing that any man or woman with an ordinary amount of self-respect should canvass for such books, especially when they contain and advertise the immoralities that many of them do. Finally, "The Science of a New Life" must in no way be confounded by a cheap and poorly printed book of a nearly similar name, widely advertised in New England, called "The Science of Life," and published by an advertising quack doctor of Boston.

We would advise our friends to secure a copy of this excellent work while they have an opportunity, as they may never have another chance of procuring a book so replete with useful and valuable information. It comes recommended by some of the most influential and leading journals of the United States; eminent clergymen and physicians of Boston and New York give it their unqualified endorsement. Therefore, reader, examine the book carefully, when the Agent calls, before you say "No."—SANTA CLARA ARGUS.

# THE SCIENCE OF A NEW LIFE, By JOHN COWAN, M. D.



HINKING and reflecting persons must allow that we as men and women are just as our parents made us. That all our irregularities of mind and disposition, our infirmities of soul and body, have been transmitted and bequeathed to us by those who gave us birth; and that one of the objects in living on this earth is—in those who live rightly—to overcome the crooked and bad that we were endowed with. This being so, any information that throws light on this immensely important subject should be welcomed with unbounded delight. This "The Science of a New Life" professes to do—in a plain, understandable manner—with great earnestness of purpose, with undoubted purity of motive, with a spirit that breathes a reverence for God's greatest handiwork—man, indicating how, by and through the observance of given laws, a clean, sweet, healthy and talented reproduction may result, and perfection on this earth therefore be possible of attainment. It also gives all necessary suggestions in the right choosing of husbands and wives, so that harmony and happiness will result, and discord and divorces be avoided.

Especially does it advocate and encourage in man and woman continence, purity of thought and asso-

ciation, and all that socially ennobles and elevates—leading the soul out of the filth and slough of sensuality up into the charmed and lovable atmosphere that encircles those who are chaste and pure in thought, word, and deed.

Altogether it aims in a systematic manner to cover the whole ground of human social life bounded by the entrance into the marriage state and the birth of a new life—with the inter-

mediate results of wrong-doing, and their indications, causes, and remedies.

Some people look with distrust on all that concerns the intimate social relations of the sexes, as knowledge that is dangerous and contaminating, that should be hid away in dark corners, or entirely excommunicated, abolished, or destroyed. Such thoughts and desires spring altogether from a wrong and misdirected education, instilling in the mind of the individual views and opinions that are narrow, contracted and unfair. That a knowledge of the whole of that part of human physiology that treats of the intimate social relations of the sexes can injure or in any way degrade the thought, the mind, the body, or the soul of the individual, would be a sad reflection on God's loving justice and mercy.

individual, would be a sad reflection on God's loving justice and mercy.

This book has most approvingly been noticed by divines of all denominations, physicians, and by over three hundred of the most prominent and influential papers of the country. Some—only a very few—of these notices, or rather short extracts from them will be found on the pages following the Table of Contents, to which the reader is referred. These notices do not include the scores of letters received from the PEOPLE, whose great sympathetic hearts beat in response to the high aims and noble purposes inculcated in the book.

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# PERSONAL AND NEWSPAPER NOTICES.

#### [From the Woman's Advocate.]

The title of this work suggests the idea of another life on this earth-plane of existencehigher, holier, and purer in its aims, aspirations, and desires, and yet it does not suggest, or even intimate, to the prospective reader the true character and nature of the volume in its mission before the world. To the actual reader the title is truly significant and appropriate—as the writer so beautifully unfolds the Laws of Reproduction, by and through the observance of which the highest and purest type of humanity may be and is produced. The regeneration of the race, through the laws of physiological and psychological reproduction, is the leading and perhaps the grandest thought of Dr. Cowan's work.

#### PERSONAL AND NEWSPAPER NOTICES.

# [From Dr. Dio Lewis, of Boston, the well-known Author and Lecturer.]

Dr. Cowan-Dear Sir: I have read your work, "The Science of a New Life." I have

more than read it-I have studied, I have feasted upon it.

During the last twenty years I have eagerly sought everything upon this most vital subject, but I have found nothing which approaches in simplicity, delicacy, earnestness and power this work. On my own account, and in behalf of the myriads to whom your incomparable book will carry hope and life, I thank you.

For years I have been gathering material for such a work. Constantly I have applications for the book, which years ago I promised the public. Now I shall most conscientiously and joyfully send them to you. I am most respectfully yours, DIO LEWIS.

### [Extract of a Letter from Robert Dale Owen to the Author.]

I thank you much for the brave book you were so kind as to send me. The subjects upon which it touches are among the most important of any connected with Social Science, and the world is your debtor for the bold stand you have taken.

Yours sincerely, ROBERT DALE OWEN.

## [From Rev. Octavius B. Frothingham, of New York.]

I have read with care "The Science of a New Life." If a million of the married and unmarried would do the same, they would learn many things of deepest import to their welfare.

Not that I am prepared to give it my unqualified praise; but the substance of the book is excellent, its purpose high, its counsel noble, its spirit earnest, humane, and pure. I trust it will have a very wide circulation. Sincerely yours, O. B. FROTHINGHAM.

# [From W. Waite Warner, Editor of the Michigan State Register.]

I can hardly thank you sufficiently for your great goodness in sending me this magnificent work, and I shall do my best to procure for you an active Agent in this State. I regard "The Science of a New Life" as the ablest and best work of the kind yet published, and feel assured that it will do incalculable good in the world. Such a work has long been needed, and I trust it will find earnest, thoughtful readers in every household in the land. It deserves a generous reception. Yours respectfully, W. WAITE WARNER.

# [From Francis E. Abbott, Editor Index, Toledo.]

Dr. John Cowan's "Science of a New Life" is a work devoted to all that relates to marriage and written in a style and spirit that command our unqualified approbation. It is plain, direct, and practical—yet permeated with so deep a reverence for the marriage relation, and so utter an abhorrence of what we are ashamed to call fashionable abominations, that pruriency will be rebuked, and the love of purity heightened by its perusal. There can be no question that physiological knowledge of this character is sorely needed by thousands and thousands of people, whose innocent offspring must pay the penalty of their parents' ignorance or vice. To those who would put a really unexceptionable book on these subjects in the hands of young persons approaching maturity, we can conscientiously recommend this as one that will enlighten without debasing.

# [From Rev. N. J. Burton, of Hartford, Conn.]

I have read Dr. Cowan's "Science of a New Life," dedicated by him to "all the married, but particularly to those who contemplate marriage," and I think it is a decidedly good book to circulate. The Doctor writes with the most downright plainness on the most delicate matters, but with the most perfect purity, and with an evident intention to do good. He inclines to be an extremist at points—as, for example, where he lays it down that no woman should marry a man who uses tobacco; but his exaggerations are always in the direction of good morals and the noblest life, and I wish him any amount of success in circulating his book.

Truly yours,

N. J. BURTON.

# [From Rev. E. O. Ward, Presbyterian Minister, of Bethany, Pa.]

"The Science of a New Life," by John Cowan, M.D., I consider well worthy of patronage, and cheerfully commend it to the confidence of my people, and hope it shall have a very extensive circulation.

REV. E. O. WARD.

### [From Moore's Rural New-Yorker.]

"If ever the reformation of the world is to be accomplished—if ever the millennium of purity, chastity, and intense happiness reaches this earth, it can only do so through rightly directed pre-natal laws." Such is the sentiment upon which this book is built up—a sentiment not admirably expressed, but admirable in its meaning. To a correct understanding of the laws pre-natal and post-natal, as also to a more thorough comprehension of what marriage should be, and what it should accomplish for mutual happiness, these four hundred and five octavo pages by Dr. Cowan must greatly conduce. They are devoted to topics concerning which no person arrived at years of thoughtfulness should be ignorant. They treat of these topics in a plain, sensible manner, in language that none but a prude can object to, and are apparently written in no spirit of quackery, but for a worthy purpose. Could the book be placed in the hands of every young person contemplating matrimony it would assuredly do much good.

### [From the Christian Advocate, New York.]

It is a difficult as well as a delicate task to discuss in a proper manner the subject of reproduction of a new human life. This the author of this work has undertaken, going into details of facts and philosophy, with constantly applied suggestions of a physiological, sanitary and moral character. The method and execution of the work are quite unexceptionable, and many of its practical suggestions are certainly valuable.

### [From the Round Table, New York.]

The dedication of Dr. Cowan's book—"To all the Married, but particularly to those who contemplate Marriage" sufficiently indicates its scope and purpose. It is an earnest plea for temperance in all things, for the subjection of the senses to the spirit, for the rule of purity and continence, especially in the relation of life which most people seem to enter only to find a pretext for discarding both. \* \* \* \* If only for the earnestness with which it denounces and condemns the atrocious practice of ante-natal infanticide, or the scarcely less revolting indecencies of prevention, the legal prostitution of all sorts for which modern marriage is made the flimsy veil, this book would be worthy of the praise of every pure-minded man and woman; but it calls for even higher approbation by its recognition and emphatic assertion of what to-day is so rarely recognized or admitted—the essential nobleness, purity and holiness of the marital state.

### [From the Methodist Home Journal, Philadelphia, Pa.]

This work is a clear, comprehensive, and yet concise treatment of laws which regulate human life, as well as those which pertain to the married relation. It is an evidently candid attempt to popularize information on one of the most important subjects which come within the range of human thought. The book is worthy an extended sale.

### [From the Hartford Courant.]

This work is very different from the works that are usually published on this subject. It is a plain but chaste book, dealing with the physical problems which most concern all human beings in the spirit of science and humanity. What we all as society need is a better understanding of physiology and the laws of health, so that men and women, knowing these laws and their own constitutions, can live properly, in such physical estate as shall produce the best mental state. This book is a very valuable contribution to that end.

#### [From the Scottish American, New York.]

This work is specially designed for married persons and those who contemplate marriage. We agree with the author in believing that "no person who exercises the unselfish and impartial of his or her nature can possibly read and reflect upon its contents without being impressed, in a greater or smaller measure, with the requirements so necessary in all that goes

to constitute life as God first planned it." The work contains a large amount of information, apart from theory, of the highest value to all who prize the blessing of "a sound mind in a sound body." It is a work which may safely be placed in the hands of all married persons, and all persons intending to marry, and their happiness would certainly be much increased by observing the rules laid down by the author. The work is carefully printed from large type, on good paper, is well bound and beautifully illustrated.

### [From the Revolution, New York.]

This is one of the handsomest volumes, as well as most elaborate treatises on its subject, that has for a long time appeared. To young families, or persons about entering the family relation, it will prove a treasure. To parents, teachers, and all who have the training of children, it cannot be too highly recommended.

### [From the Banner of Light, Boston.]

We welcome a publication of this sort with undisguised sincerity, thankful that the time at last has come when fundamental and radical physiological truths may be told to the people plainly. Had such books been placed in the hands of younger men two or three generations ago, their effect would have been visible enough in the physical character and habits of the men of to-day.

### [ From the Lowell Daily Courier. ]

This is the only book of this character we have ever seen which seem to be imbued with a conscientious spirit from beginning to end. Hundreds of books on love, marriage, and the relations of the sexes, have been written to sell. Many of them have done infinite harm, instead of remedying the evils they pretended to combat; but nobody can practice on the principles laid down by Dr. Cowan without being better and wiser.

#### [From the New York Albion. [

"The Science of a New Life," by John Cowan, M.D., is a hygienic and social guide which many men, whether married or single, will be the better for carefully perusing. " " " It devotes a large space to matters more or less physiological in their character, and in so doing treads upon somewhat delicate ground; yet we have failed to detect anything which might be regarded as inadmissible in a book intended for the instruction and to promote the well-being of those into whose hands it may fall. It discusses the subjects on which it treats in a refined and Christian spirit and with much good sense.

### [From the Farmer, Bridgeport, Conn.]

Upon no topic connected with our physical well-being does so much ignorance prevail, and consequently abuse or wrong-doing, as upon those so fully treated of in this work. The book should have a wide circulation. The author has dedicated it to "all the married, and particularly those who contemplate marriage." He should have dedicated it to "all the world, and the rest of mankind," for its expositions and teachings are important not only to the married and those who contemplate marriage, but to all, both of high degree and low degree, civilized or savage."

### [From the Register, South Jackson, Mich.]

Books of this character can not be multiplied too rapidly, nor can the influence of such works as this, in releasing men and women from the strong bonds of ignorance, vice, and crime, be too highly estimated. The human race, we know, needs something stronger and more powerful than the influence of a single volume, however good, to remove the many evils of social and domestic life—line upon line, precept upon precept—a little here, and a great deal more there, can alone accomplish the great work of reformation, and restore the wasted, sin-polluted lives of our fellow-beings to a condition of moral purity; but we must admit that Dr. Cowan has done all that any lover of his race can do to check the downward course of the ignorant, thoughtless, and sinful.

# ADDITIONAL PERSONAL AND NEWSPAPER NOTICES.

[From the Albany Evening Journal.]

The title of this book does not clearly indicate the matter of which it treats, and yet its appropriateness is seen as soon as the reader comprehends the Authors high purpose. The book relates to the fundamental laws regulating intercourse between the sexes. The mass of such books are disgusting catchpennies, cheaply printed, and, if not directly obscene, are without any higher purpose on the part of the writers than to minister profitably to

a depraved curiosity.

Of Dr. Cowan we do not know except what insight his book gives us. It is evidently written for a conscientious purpose — that of doing good. The subject is one of extraordinary delicacy, but there is no lack of courage in meeting it, and no want of that refinement of language which alone can commend such a work to the good and the virtuous. As an aid in imparting knowledge on various delicate subjects and in exposing the evils connected with the abuse of the system, we can earnestly commend this book. Those who sin through ignorance will be enlightened; those who wish to be purer, and can be influenced by a high minded appeal, will be strengthened; and neither the impure nor the innocent will be made the worse by it. The influence of Christianity is recognised and made the basis for the reform advocated. The general subject is one of such immense importance that any books which conscientiously supplies information without ministering to depraved passions should be welcomed. There can be no indelicacy in popularizing the knowledge of evils into which tens of thousands rush blindly, and in making men and women acquainted with the responsibilities they assume and the dangers they incure when they enter into the marriage relation.

### [From the Utica Herald and Gazette.]

This work is a treatise on matters relating mainly to the physicial welfare of the race-It is a timely warning against the many evils which arise from an abuse or ignorance of the laws which govern the relation of the sexes. As such it is a medical book. It rises, however, above the mere details of anatomy and discusses conscientiously the effects which are in various ways produced upon the character and life. It is outspoken against that sensousness which is to often made to crush out the higher thoughts and aims which should characterise the life union. The matters which fill its chapters are to little understood by those who should know them well. There has been no lack of quack publications called marriage guides, but a plain, truthful treaties, from one whose name is a surety of value, has a good work to perform. Such a book is the publication before us. A portion of its pages is devoted to a denunciation of the apparently increasing crime of child-murder. As a source of information upon maters of vital importance to the classes for whom it is intended Dr. Cowan's treaties can hardly fail to be of great value and utility.

### [From the Albany Argus.]

This excellent work is so superior in style and matter to the numerous worthless books, with which the country is flooded that we are not willing to let it pass without commending it to the thoughtful consideration of our readers. Treating of those important topics that refer to the health and purity of mind and body, ignorance of which, at this enlightened day, is inexcusable, in a manner, earnest and forcible, but chaste and elegant, it is a reliable hygenic and moral guide. Parents often make a terrible mistake, in not speaking freely to their children of physiological laws, and of the social and moral evils, that may beset them in life, and too frequently they acquire dangerous information and fatal habits from corrupt associations. On all the subjects in which men and women are most deeply interested this book is a sound teacher, and to married persons its lessons are invaluable.

### [From a Wife and Mother.]

\* \* \* I can spend my time in no better way than canvassing for such a book. I have a copy of it — have read and re-read it. O if I had only had it two years earlier, the tears it might have saved me. Would that I could be an aid to put it into the hands of every man and woman in the land. God will certainly bless you in your earnest endeavours to rescue mankind from the depths of the darkness into which they have been plunged.

### [From Various Readers.]

While recently over in Oregon I providentially saw for the first time a copy of your valuable because much needed work "The Science of a New Life," I had not read an hour in it

until satisfied it was the book of all others this generation most needed. For thirty years I have seen a need for this work and have hoped that some one of sufficient information, standing and talent would produce it. I have purchased and read the copy alluded to, and find it more than meets my highest expectation of moral and scientific worth. J. F. R—

(For 30 years a minister and 20 years a physician.)

My opinion of the book is—the world wants it, the present state of humanity demands it. Nor can the physicial and moral condition of the world be improved untill humanity feels their need for this book.

J. W——

(An agent who has sold over 1000 copies of the work.)

### [From the Pittsburg Dispatch.]

This is the title of a volume just issued from the press, the author being Dr. John Cowan an eminent physician, and who, judging from the tone of his book, must likewise be a true Christian philanthrophist. It takes up the theory that if ever the reformation of the world is to be accomplished, it can only come through the medium of rightly directed observance of ante-natal laws. Dr. Cowan holds to this belief firmly and supports it by illustrations and arguments whose force will appeal to every intelligent reader. \* \* \* Desire for physiological knowledge is daily spreading and when taught through such an excellent and correct medium as this, its results cannot be other than valuable.

### [From One of the World's Workers.]

I sincerly believe if "The Science of a Life" whenever read by an intelligent individual, it will do him or her more good than the getting of Religion in the popular way. My heart is full of thanks for its author. Ever since I was a young man, I have taken much interest in reading books of like contents, but I never found a work that went in such good earnest to the bottom of the subject of Human Reform. I verily believe that any agent who will sell 1000 copies of "The Science of a New Life" will be the means of accomplishing more positive and lasting good than any fashionable preacher will accomplish in forty years of his ministerial service, for the kind of preaching that is now mostly needed, is that which teaches and enlightens people on the subject of generation, securing to posterity a sound virtuous and intelligent generation, and where this is accomplished there will be less need to talk of Re-generation.

### [From the Rochester Democrat and Chronicle.]

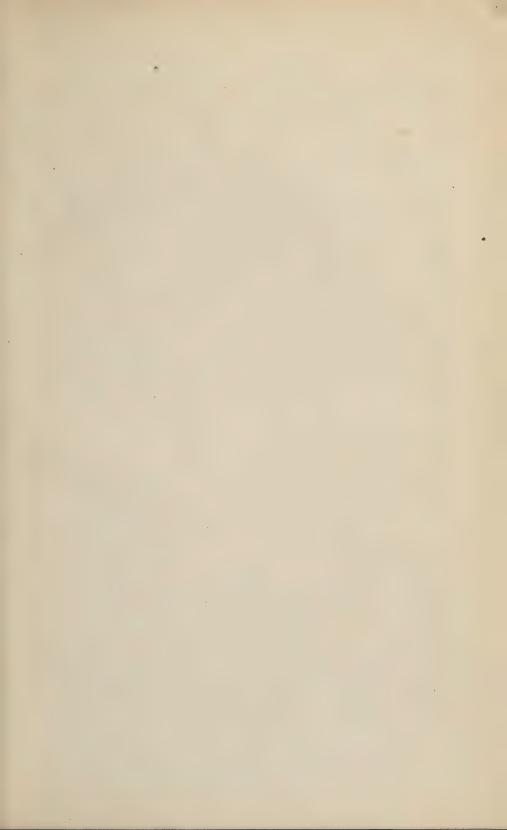
We can conscientiously commend "The Science of a New Life" to all married persons and those contemplating marriage, for whom it is designed. Its purpose is to thoroughly acquaint the people with the laws, that most intimately affect their being, in such a way as to promote chastity and a pure life. If husbands will heed it wives will bless them. Plainness of speech is used; but the requirements of delicacy, nevertheless, are strictly followed. We are quite sure the work will meet the approval of the medical profession. There is no question upon which there is more ignorance; none on which we need more thorough knowledge. And of all the abuses of men, there are none more disasterous than these which this healthy volume seeks to correct.

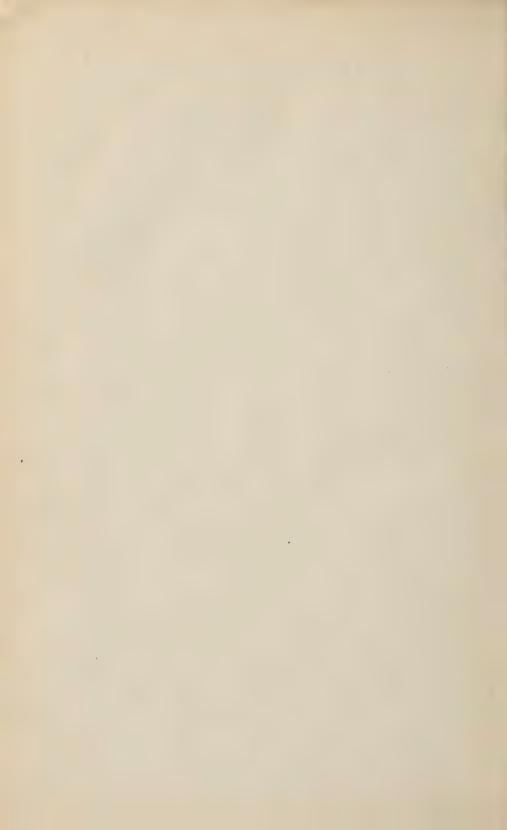
### [From a young Minister in Pa.]

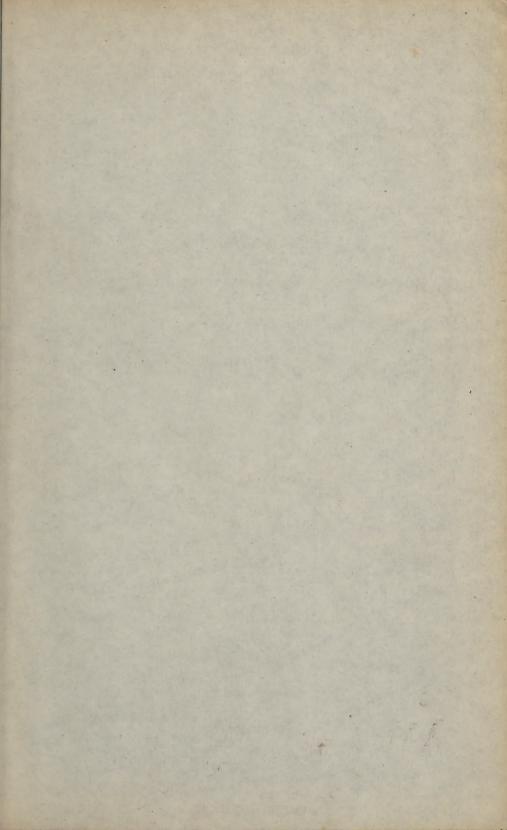
I never can tell how thankful I am that God put it in my way in the morning of life. I never had seen the standards of purity lifted so high before, but my heart responded to them the first time I read them. I said this is the truth and though I have never seen or heard it before, by that will I require my life.

### [From the Pastor and People. Wm. M. Cornell, M. D. LL. D. Editor.]

The external and internal beauty of the book and its numerous illustrations in such contrast with the mass of catchpenny works relating to similar subjects, is in harmony with the ideal of purity, health and happiness, with which the author seeks to invest the domestic and conjugal states, and by which especially to lay the broad foundation for the health and happiness of the children which may bless the founders of the new home, — the originators of the New Life. Without endorsing every idea or expression contained in this volume, which we have carefully read, we are free to say that its suggestions followed with any reasonable degree of fidelity would give health to many a wearied wife and wretched husband; would bring peace to many a disturbed and troubled home, and confer blessings on many children yet unborn. "The Science of a New Life" is no cheap medium for the advertisement of drugs, nostrums and humbugs, but it is a sensible, interesting book, containing nothing to offend the purest mind, but ministering to the interests of virtue, health and religion, and profitable to all who may read it.











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